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# CATALOG 2020-2021

DOWNERS GROVE, ILLINOIS CAMPUS



MIDWESTERN UNIVERSITY

*Tomorrow's Healthcare Team*

# MIDWESTERN UNIVERSITY COURSE CATALOG 2020-2021

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# MIDWESTERN UNIVERSITY

I welcome you to our Downers Grove Campus and your new academic community. The students of Midwestern University represent a dynamic group of individuals who share a passion for learning, a personal drive that prepares them for a long and successful professional healthcare career, and a commitment to excellence. Midwestern University is a special place, and our students are active participants within the campus and external community.

It is our philosophy that students learn within our team environment by studying and sharing experiences with their peers while being mentored and coached by our faculty and staff. At Midwestern University, the commitment to excellence in education is the ultimate goal of mine and the entire University Administration, which takes a personal interest in the quality of education while providing a safe and secure environment in which to live and learn.

What makes us special? Our foundation is the strong faculty and staff who work diligently to provide you with outstanding educational opportunities. We believe in a continuum of education that begins as you enter Midwestern and never ends. It is our mission to provide you with the best education to prepare you to serve in your chosen career.

Midwestern University makes a commitment to its students that they will be intellectually prepared to serve the community as healthcare professionals who have the skills, ability, and leadership to meet the changing demands of healthcare. I am proud to say that our students and alumni reflect the positive human values we believe are essential within the changing healthcare environment in order to make a significant contribution to society. Our students care about their patients as well as their colleagues and families.

Midwestern University provides you with dedicated faculty who excel in teaching, research, and service within their professions. The University exists to preserve, extend, and transmit knowledge and deepen understanding of the health and well-being of the human person. Our tradition of excellence is based on a long legacy of dedicated teachers and professionals who have demanded academic excellence and respect for the dignity of the whole person.

Our colleges are known for their innovation and excellence in education. As a student within the Chicago College of Osteopathic Medicine, the Chicago College of Pharmacy, the College of Health Sciences, the College of Graduate Studies, the College of Dental Medicine-Illinois, or the Chicago College of Optometry, I know you will find our values and beliefs to be consistent. We are one academic community working together to provide you with an outstanding education.

I welcome you to this dynamic academic community. I hope you will find your days on the Downers Grove Campus of Midwestern University to be intellectually challenging and personally rewarding.

*Kathleen H. Goepfing, Ph.D.*  
*President and Chief Executive Officer*

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## MISSION

Midwestern University's historical and sustaining philosophy dedicates the institution and its resources to the highest standards of academic excellence to meet the educational needs of the healthcare community.

## VISION

Midwestern University will provide a safe and healthy environment that challenges its faculty, staff, and students to:

- Promote and maintain the osteopathic philosophy
- Nourish intellectual creativity and foster the critical thinking and communication skills that stimulate personal growth and engender professional development
- Support the teaching, scholarly activity, and service capabilities of the University
- Respect, appreciate, and acknowledge the achievements of all members of the academic community
- Embrace cultural and social diversity in the academic community and the community-at-large

## HISTORY

*Midwestern University: A Legacy of Growth and Development*

Midwestern University has a proud and impressive history. Founded in 1900 as the American College of Osteopathic Medicine and Surgery by J. Martin Littlejohn, Ph.D., D.O., M.D. (1865-1947), the organization was incorporated in Chicago, Illinois, to train physicians in a not-for-profit environment.

Dr. Littlejohn hired talented faculty that enabled the College to establish a reputation as a leader in medical education, research, and clinical practice. The early faculty mentored their students in the art and science of osteopathic medicine while teaching surgery, principles and practices of osteopathy, anatomy, and basic science. The growth of our osteopathic college is intertwined with that of the osteopathic medical profession itself. Ever since 1874 when a country doctor, Andrew Taylor Still, announced his new theory of osteopathy and began the first college in 1892, the profession has grown in reputation and acceptance around the country and many international settings.

Today, Midwestern University is still governed by the strong principles of the founding administration and faculty. We are an independent, not-for-profit corporation organized primarily to provide graduate, and postgraduate education in the health sciences. We are dedicated to the education and development of our students, faculty, and staff in an environment that encourages learning and personal development.

From the earliest days of our founding college, the development of the University has been impressive. The vision of the University leadership is to serve the needs of society by developing the healthcare team of tomorrow, while students learn the art and science of their professions within a safe and secure campus environment.

The Downers Grove, Illinois, Campus was purchased in 1986, and the Chicago College of Osteopathic Medicine (CCOM) moved from its prior home in Hyde Park, Illinois, to this western suburb. Following the relocation of the College, the Board of Trustees voted to begin the development of new academic programs within the health sciences. The Chicago College of Pharmacy (CCP) began in 1991, the College of Health Sciences (CHS) began in 1992, the College of Dental Medicine - Illinois (CDMI) in 2009, the Chicago College of Optometry (CCO) in 2014 and the College of Graduate Studies (CGS) in 2018. In 1993, the Board of Trustees unanimously approved a single, educational mission for the institution, and Midwestern University emerged. Today the Downers Grove Campus, located on 105 acres, has 20 buildings that include academic classrooms, laboratories, a state-of-the-art library and auditorium building, science building, student commons, recreation center, and student housing. The University also opened the MWU Multispecialty Clinic in 2013.

The Glendale, Arizona, Campus was founded in 1995 when the Board of Trustees approved the purchase of land and the building of this new campus. The Arizona College of Osteopathic Medicine (AZCOM) began in 1995, the College of Health Sciences in 1996, the College of Pharmacy-Glendale (CPG) in 1998, the College of Dental Medicine (CDMA) in 2006, the Arizona College of Optometry (AZCOPT) in 2008, the College of Veterinary Medicine (CVM) in 2012 and the College of Graduate Studies (CGS) in 2018. The campus has seen rapid growth in the number of buildings, academic programs, faculty, staff, and students. Today the Glendale Campus, located on 156 acres, has 52 buildings that provide for academic classrooms, state-of-the-art laboratories, student commons, auditorium, recreation center, student housing, a Multispecialty Clinic, the Dental Institute, the Eye Institute, the Therapy Institute, and the Animal Health Institute.

Midwestern University has developed strong partnerships with healthcare providers and facilities around the country to aid in the education of students in all of its academic programs. The history of the institution is reflected in the many alumni who have successful careers and a deep affection for their college and University. The Administration and the Board of Trustees are dedicated to fulfilling our mission of excellence and service. We remain committed to our tradition of providing quality health care education. We are educating tomorrow's healthcare team.

## ACCREDITATION

Midwestern University is accredited by the Higher Learning Commission (230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413; 800/621-7440; [www.higherlearningcommission.org](http://www.higherlearningcommission.org)).

Please refer to the specific college sections of this catalog for further information on program and professional accreditation.

### *Minnesota Registration*

Midwestern University is registered as a private institution with the Minnesota Office of Higher Education pursuant to sections 136A.61 to 136A.71. Registration is not an endorsement of the institute. Credits earned at the institute may not transfer to all other institutions.

### *Texas Workforce Commission*

Midwestern University is not regulated in Texas under Chapter 132 of the Texas Education Code.

### *State Authorization Reciprocity Agreement (SARA) Initiative*

Midwestern University is an institutional participant in the SARA Initiative.

## ARTICULATION AGREEMENTS

Midwestern University has agreements with Arizona State University and Grand Canyon University. Aside from these two articulation agreements, college-specific articulation agreements are included in the college subsections of the Catalog.

## CONFERRAL OF DEGREES

The Illinois Board of Higher Education has approved all current degree programs at Midwestern University's Downers Grove Campus. All degrees are conferred by the authority granted by this Board.

## EQUAL OPPORTUNITIES FOR ALL

Midwestern University maintains a policy of nondiscrimination for all students regardless of race; color; religion; creed; national origin or ancestry; ethnicity; sex (including pregnancy); gender (including gender expression, gender identity; and sexual orientation); marital status; age; disability; citizenship; past, current, or prospective service in the uniformed services; genetic information; or any other protected classes recognized by state or local laws, or any other characteristic protected under applicable federal, state, or local laws.

## RIGHT TO CHANGE REQUIREMENTS

This Catalog is not a complete statement of all applicable procedures, policies, rules, and/or regulations. Midwestern University reserves the right to change the Catalog or any University policies or procedures from time to time. Those changes include, but are not limited to, changes to the calendar; admission and degree requirements; fees; procedures, policies, and/or regulations; course offerings, contents, formats, delivery methods and modalities, and other pedagogical methods; programs, including objectives



and mission and vision statements; academic schedules and scheduling; class schedules and scheduling; offering patterns; events; class offerings and availability (including cancelling scheduled classes); events; and other academic activities. The University may change, modify, or alter, with or without notice, any information contained in the Catalog, Student Handbook, or other issued materials or information at its sole discretion. Students are responsible for understanding all requirements of the University, making themselves aware of any changes, and conforming to those changes. Tuition and fees are set regardless of any change made by Northwestern University.

## FACILITIES

Students enjoy a 105-acre campus in Downers Grove nestled serenely within a rolling, wooded setting. The campus features the following facilities:

- Littlejohn Hall, the library technology center with extensive book, journal, and electronic collections linked by a computerized system, a medical informatics laboratory, a large multi-sectional auditorium and comfortable lounge and study areas.
- Alumni Hall, an academic facility with state-of-the-art osteopathic manipulative therapy, physical therapy and occupational therapy labs, classrooms, research facilities, and faculty offices.
- Centennial Hall composed of a pharmacy practice laboratory, three research laboratories, and two 258-seat lecture halls/classrooms.
- Recreation and Wellness Hall featuring a fully equipped weight room, an aerobic exercise room, racquetball/handball courts, a gymnasium, craft room, and music room. Additional recreational facilities include athletic fields for intramural sports.
- The six-story Redwood Hall features the Dorothy and Ward Perrin Interfaith Chapel, kitchens, classrooms, an auditorium, and residence hall rooms.
- The Commons student center houses the campus bookstore, mailroom, a full-service dining hall, coffee shop, computer lab and administrative offices.
- Haspel/Hambrick Hall provides space for administrative offices.
- Science Hall, a five-story academic building with modern classrooms, research laboratories, dental simulation clinic, student testing center, and faculty offices.
- Cardinal Hall, the 137,000 square-foot building includes a large auditorium space that can be used for campus-wide ceremonies and also be divided into five large lecture halls. The building also includes additional classrooms, a simulation center, and academic office space.

- White Oak Hall, named in honor of the official state tree of Illinois, features classrooms, offices, and fully-equipped optometry laboratories. The building also includes a 24-hour student study room with a separate entrance, kitchenette, and vending machines.
- The Northwestern University Multispecialty Clinic provides a state-of-the-art educational experience for Northwestern students while also meeting the community demand for a wide-range of patient care. The clinic is located approximately 10 minutes from the Downers Grove campus at 3450 Lacey Road, Downers Grove, IL. The six-story building includes the Dental Institute, Family Medicine, Eye Institute, Speech-Language Institute, and Physical Therapy Institute.

## HOUSING

### *Redwood Hall I*

Redwood Hall I is a modern student residence facility that features 80 single occupancy residence hall rooms. Each room includes a bathroom shared by two adjoining residents, air conditioning, wireless Internet, DirecTV, wall-to-wall carpeting, bed, built-in closet, dresser, desk and chair, and wardrobe. Five single occupancy units are available with private bathrooms.

### *Redwood Hall II*

Redwood Hall II features a variety of floor plans, with single occupancy rooms for 131 residents. Each room includes a private or shared bathroom, air conditioning, wireless Internet, DirecTV, wall-to-wall carpeting, bed, built-in closet, dresser and desk and chair. Redwood Hall II also houses the Dorothy and Ward Perrin Interfaith Chapel.

### *The Pines Apartments*

The Pines Apartments are tucked away between two groves of trees, providing both the convenience of on-campus living and the privacy of an apartment. Each of the 48 one-bedroom apartments offers 500 square feet of living space, Internet access, DirecTV, kitchenette with stove and refrigerator, and central air conditioning and heating units. Apartments are furnished by student occupants.

For further information regarding on-campus housing on the Downers Grove Campus, students may contact the Office of Residential Life at 630/971-6400.

## AMERICANS WITH DISABILITIES ACT POLICY

Northwestern University makes reasonable accommodations for the physical and mental limitations of students, faculty and staff to the extent that such accommodation does not impose an undue hardship on the conduct of its business. The University's planning includes reasonable physical accommodation to the special needs of disabled individuals

and disabled veterans, including access to the buildings, utilization of the restroom facilities, and mobility requirements within building and parking locations.

Disabled students' rights are protected under Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act of 1990 (ADA). It is the policy of Northwestern University to ensure that no qualified student with a disability is excluded from participation in or subjected to discrimination in any University program, activity, or event.

## CRIMINAL BACKGROUND CHECKS

Due to growing nationwide concerns regarding the suitability of today's healthcare professionals, many hospitals, healthcare systems, clinics, physician offices, or pharmacies providing healthcare services require disclosure of an individual's criminal history. In addition, many state statutes also require disclosure of an individual's criminal history in order to apply for certain health professional certificates, registrations, and licenses. Existence of a criminal history may subject an individual to denial of an initial application for a certificate, registration, or license to practice in a clinical setting or result in the revocation or suspension of an existing certificate, registration, or license. In response to this growing trend, Northwestern University requires students to submit to criminal background checks.

It is the policy of Northwestern University that all accepted students must submit to a criminal background check prior to matriculation. In addition, students who remain enrolled must submit to a criminal background check as needed to remain eligible for continued participation and/or to participate in clinical rotations. A criminal background check may necessitate one or more of the following: 1) a standard criminal background check conducted through an approved background check agency, 2) a fingerprint background check conducted by an approved agency, in which the prints are submitted to both State Police and the FBI database and/or 3) an International Police Clearance. The procedure utilized to conduct the background check will be based upon the individual's residency status, country of origin, time in residence in the United States and specific program requirements. In accordance with the laws of the State of Illinois, CCOM students are required to undergo fingerprinting as part of the criminal background check process. Students in other programs may also be required to undergo fingerprinting. The criminal background check involves obtaining an authorization from a matriculating or current student that allows the University to obtain the student's individual criminal history. The results of the background check are reviewed by the Dean of Students to determine whether or not there is a record of misdemeanor and/or felony convictions. If there is a positive record, the Dean of Students will inform the appropriate College Dean

and the Director of University Risk Management so the University can make a determination whether the criminal history will negatively impact the student's admission status or ability to complete the practical training/rotation requirements of the degree program. Criminal background checks are conducted through the Office of Student Services as part of the initial student matriculation process and on an as-needed basis thereafter while a student is actively enrolled at Northwestern University.

1. All matriculating students must complete the Criminal Background Release and Consent Form to conduct the criminal background check. All newly admitted students who have submitted a matriculation deposit are provided with access to a copy of the University policy and the Criminal Background Release and Consent Form. By going to the Northwestern University website (<http://www.northwestern.edu>) and selecting MWUNET, the student can complete the Consent Form, which can be found under the Student Services Tab on the portal. The Policy can be accessed by logging into the Student Handbook under the Resource section and selecting 'Criminal Background Check Policy'.
  - Incoming pharmacy, optometry, and dental students will complete a criminal background check through the appropriate application agency (PharmCAS, OptomCAS, or ADEA). The results of those background checks will be forwarded to Northwestern University.
  - Incoming international students must complete an International Police Clearance, either under the guidance of Northwestern University or their application agency. If the international student has also resided in the United States within the seven year period prior to matriculation, the student must also complete a criminal background check. The International Police Clearance must be initiated by the student according to the guidelines of the country from which the Clearance is required.
  - Incoming students must complete the criminal background check requirement prior to matriculation. For students who are admitted close to their matriculation date, or for students whose situation may necessitate an extension, the criminal background check must be completed by the end of the first month of the first quarter of enrollment for their program. Failure to complete the background check within the stated timeframe jeopardizes their continued enrollment, and the

- student may be required to take a mandatory leave of absence.
2. The Office of Student Services will contract with a professional service to conduct the criminal background check.
  3. The Dean of Students will review all criminal background reports and determine whether or not a misdemeanor or felony conviction record exists. If a felony or misdemeanor conviction exists, the Dean of Students will conduct a criminal background investigation. The investigation may include any of the following components:
    - Request for additional detailed information about the positive criminal background check report. This may entail one or more meetings with the student.
    - Collection of additional data, e.g., Federal Bureau of Investigation fingerprints and report, concerning the positive criminal background check report. Following the criminal background investigation, the Dean of Students, in consultation with the Academic Dean (or their designees), will determine whether or not the student should be disqualified from matriculation or continued enrollment. A record of criminal activity will not automatically disqualify a student from enrollment or continued enrollment. The University will consider such factors as (but not limited to) the nature of the crime, the age of the individual at the time the crime was committed, length of time since the criminal activity, any fines, sanctions or convictions, the nature of the clinical program and the relatedness of the conviction, and whether the University will be able to provide appropriate professional clinical training to the student. Students who are permitted to matriculate with a positive criminal background check are required to sign a waiver stating their understanding of the possible negative impact of their background check on their education, postgraduate training and licensure.
  4. Failure to disclose criminal activity or material misrepresentation of information by an incoming student is deemed to be falsification of the application and may result in denial of admission, matriculation and/or dismissal from the program and University. Failure to disclose criminal activity or material misrepresentation of information by an enrolled student is deemed to be a violation of the student Code of Conduct and may result in dismissal from the program and University.
- Incoming and enrolled students must disclose any criminal activity, including misdemeanor or felony charges/convictions to their Academic Dean and the Dean of Students.
5. Failure of the student to present appropriate forms to the Office of Student Services for the purpose of conducting criminal background checks when requested will bar the student from initial matriculation and/or continued enrollment.
  6. Students with a positive criminal background check are individually responsible for checking the licensing and certification requirements in any state where the student is interested in participating in a postgraduate residency training to determine whether or not their criminal background will be a barrier to participation.
  7. Students are required to disclose to the Dean of Students and appropriate Academic Dean any arrests, criminal charges, or convictions against them during their entire period of enrollment as a student at Midwestern University. Disclosure must be made immediately after the incident that resulted in charges so the University can assess the impact of the incident on the student's academic progression. Such arrests, criminal charges, or convictions may negatively impact a student's ability to obtain and/or complete clinical rotations or preceptorships, post-graduate residency placement or licensure.
  8. Midwestern University does not guarantee clinical rotations, post-graduate residency placement or licensure for students who have a positive criminal history. Clinical rotation placement, post-graduate residency placement, and licensure are governed by separate entities who use their own specific set of standards that may be different than those used by Midwestern University. In such cases, the University confidentially shares information about the student's positive criminal history with potential preceptors and practice site representatives as necessary and on a need-to-know basis. This may include releasing a copy of the original Criminal Background Check report for their review. This gives the preceptor and site representatives an opportunity to decide whether the student is acceptable to the site. For this reason, scheduling and completion of practical training/rotations and graduation may be delayed. In some instances, it will not be possible to arrange for practical training/rotations at specific sites. Under these circumstances, the college/program will work with the student to find a possible clinical rotation site that will accept a student with a positive criminal background check.
    - If this information is known by the University prior to the student's matriculation, the Academic Dean (or their designee) will meet with the potential student to discuss the consequences of the

- positive criminal background investigation on the student's ability to complete degree requirements, post-graduate residency placement and licensure so that appropriate action can be taken.
- If this information is known by the University after the student's matriculation, the Academic Dean (or their designee) will meet with the student to discuss the consequences of the positive criminal background investigation on the student's ability to start/resume practical training/rotations and the student's ability to graduate, secure a post-graduate residency and obtain licensure so that appropriate action can be taken.
9. Records concerning a student's positive criminal background check are stored in a confidential file in the Student Services Office.
  10. In the event that a student is assigned to a practical training/rotation site that requires a copy of the original Criminal Background Check report prior to a student's placement at the site, the student's criminal background check report and cover letter will be scanned into an encrypted password protected PDF file. The encrypted PDF file will be forwarded via email to the rotation site coordinator.

## HARASSMENT/UNLAWFUL DISCRIMINATION

Midwestern University believes in the dignity and worth of its students, faculty, staff, interns, and residents and therefore maintains a policy of nondiscrimination for all students, faculty and staff regardless of race, color, gender, gender identity, sex, sexual orientation, religion, national origin, ethnic origin, disability, status as a veteran, marital status, pregnancy status, or age. Any form of unlawful discrimination or harassment that has the effect of substantially interfering with the individual's performance or creates an intimidating, hostile, or offensive learning/working environment is not tolerated by the University. This policy/procedure establishes a protocol whereby those who believe they have been discriminated against or harassed may obtain redress promptly and equitably through formal and informal procedures of the University.

This policy applies to all members of the University community, each of whom is expected to report promptly complaints about violations. Students found to be in violation of this policy shall be subject to disciplinary action, which may include, but is not limited to, disciplinary warning, disciplinary probation, suspension, or dismissal. No action shall be taken against anyone who submits a complaint that he or she believes to be valid - regardless of the outcome of the investigation; however, any person found to be

intentionally dishonest in making the allegations or to have made them maliciously is subject to University discipline.

### Definitions

*Unlawful Discrimination:* Unlawful discrimination refers to unfair or unequal treatment of an individual or group based on protected status, such as race, color, gender, gender identity, sex, sexual orientation, religion, national origin, ethnic origin, disability, status as a veteran, marital status, pregnancy status, age or other protected group status as defined by law.

*Harassment:* Harassment includes all unwelcome conduct (whether verbal, physical, visual or written) based on an individual's protected status, such as race, color, gender, gender identity, sex, sexual orientation, religion, national origin, ethnic origin, disability, status as a veteran, marital status, pregnancy status, age, or other protected group status as defined by law. Among the types of conduct prohibited by this policy are teasing, jokes, slurs, epithets, and negative stereotyping based on another person's protected status. Even where the conduct is not sufficiently severe or pervasive to rise to the level of a legal violation, MWU discourages any such conduct in the workplace and/or any of our related educational settings and reserves the right to take remedial action for all conduct it deems inappropriate.

### Complaint Process

#### *Informal Complaint Resolution*

Any member of the MWU community may seek advice, or information, on matters related to harassment without having to lodge a formal complaint. Students who feel they are being harassed, or are uncertain as to whether what they are experiencing is harassment, are encouraged to talk to the Dean of Students. The complaining party (the "complainant"), will be informed as to the options available under this policy, including upgrading the informal complaint to a formal written complaint (see below #2). At the complainant's request, steps will be taken to resolve the complaint informally. The aim of the informal resolution process is to ensure that the alleged offending behavior ceases and that the matter is resolved promptly. The name of the complainant will be held in confidence during the informal resolution process, unless and until the complainant agrees that additional people must be informed in order to facilitate a solution. The Dean of Students will have the discretion to determine when the situation warrants notification of an alleged offender. If deemed advisable, constructive, confidential informal discussion to increase awareness will be undertaken with the person alleged to have violated this harassment policy. An informal complaint may also be elevated to a formal complaint by the Dean of Students because of the severity of the factual allegations made by the complainant or because of the frequency of allegations against the alleged offender (see section below).

### *Formal Complaint Resolution*

Prior to any formal action, a formal complaint must be reduced to writing, identifying both the complainant and the alleged offender.

1. After a complaint has been reduced to writing, an investigation of the alleged harassment will be initiated by the Dean of Students, if possible, within 3 working days. For complaints against faculty, staff, administrators and preceptors, the Dean of Students and the Director of Human Resources will initiate a joint, formal investigation of the allegations, with the right to interview other parties in relation to the complaint in order to conduct a fair and thorough investigation.
2. The investigation will include, at a minimum, an interview with the complainant. The alleged offender will be interviewed if it is determined that the allegations, if true, would constitute a violation of this policy. The alleged offender will then be informed of the nature of the allegations, the identity of the complainant, the facts surrounding the allegations, and will be afforded a full opportunity to respond to the allegations. Any other person who may have information regarding the alleged harassment may also be interviewed.
3. Notes and documentation of all interviews relating to the investigation will be maintained. All matters related to the investigation shall remain confidential to the extent permitted by law, provided it does not interfere with MWU's ability to investigate or take corrective action.
4. The Dean of Students will report his or her findings to the college dean/department or division head/program director of the alleged offender for disposition typically within 10 working days of the receipt of the written complaint. For incidents involving faculty, staff, administrators and preceptors, the findings will be reported to the Vice-President of Human Resources, as well as the college dean/department or division head/program director when applicable.
5. The report shall include the allegation, the investigative process, the persuasiveness of the evidence, and the credibility of the witnesses. The report shall arrive at one of the following 3 findings based upon the preponderance-of-the-evidence standard (i.e., that is more likely than not that harassment/unlawful discrimination occurred):
  - a. Harassment/unlawful discrimination has occurred;
  - b. Harassment/unlawful discrimination did not occur; or
  - c. There is inconclusive evidence as to whether harassment/unlawful discrimination occurred.
6. Upon review, the college dean/department or division head/program director or Vice-president of

Human Resources responsible for receiving the report will recommend or take appropriate disciplinary action, if applicable.

7. Notification of the findings and disposition as recommended by the college dean/department or division head/program director or Vice-President of Human Resources shall be provided, confidentially, in writing, to both the complainant and the alleged offender.
8. The complainant or the alleged offender may appeal the decision of the college dean/department or division head/program director or Vice-President of Human Resources or Dean of Students.
9. All complaints and associated resolutions will be kept on file in the Office of the President in accordance to HLC/NCA accreditation requirements and in the Office of the Dean of Students when complaints/resolutions involve students.

### **Appeal by a Student**

1. A student's request for appeal must be submitted in writing to the President within 14 calendar days of the date of notification of findings. The President can designate the appropriate Vice President, Chief Academic Officer to review the case.
2. The appeal shall proceed according to the procedures stated in section 1 of the student handbook.

### **Protection Against Retaliation**

MWU shall not in any way retaliate against any individual who informally or formally complains of harassment. Retaliation is a serious violation of this harassment policy. Any person found to have retaliated against another individual for reporting harassment will be subject to disciplinary action up to and including dismissal.

## **SEXUAL MISCONDUCT**

The University is committed to ensuring the safety and security of all its members. Sexual misconduct is a serious violation of the standards set by the University community since it creates an atmosphere of distrust and inequality and will not be tolerated. Sexual misconduct includes sexual harassment, sexual abuse, sexual assault or rape, domestic violence, dating violence, and stalking. This policy/procedure establishes a protocol whereby those who believe they have been subjected to sexual misconduct may obtain redress promptly and equitably through the policies and procedures of the University.

This policy applies to all members of the University community, regardless of position/status, gender or sexual orientation. Each member of the University community is expected to report promptly complaints about violations.

Any student found to be in violation of this policy shall be subject to disciplinary action, which may include, but is not limited to, disciplinary warning, disciplinary probation, suspension, or dismissal. Any action taken by the University is independent of actions taken by external law enforcement agencies. No action shall be taken against anyone who submits a complaint that he or she believes to be valid - regardless of the outcome of the investigation; however, any person found to be intentionally dishonest in making the allegations or to have made them maliciously is subject to University discipline.

**No Retaliation Statement:** No action shall be taken against anyone who submits a complaint that he or she believes to be valid - regardless of the outcome of the investigation; however, any person found to be intentionally dishonest in making the allegations or to have made them maliciously is subject to University discipline.

### **Title IX**

Title IX of the Educational Amendments of 1972 prohibits sexual discrimination. Sexual harassment and sexual violence are considered forms of sexual discrimination, and are therefore violations of Title IX. Violations of the University Sexual Misconduct Policy must be reported to Dr. Ross Kosinski, Dean of Students - Title IX Coordinator.

### **Confidentiality**

Employees of the University, including Resident Advisors in Housing, are required to report incidents of sexual misconduct to the Title IX Coordinator regardless of whether the student reporting the violation requests confidentiality. Campus counselors are not required to report, without the student's consent, incidents of sexual misconduct to the school in a way that identifies the student' (OCR) and therefore can be approached in confidence. Nonetheless, Midwestern University will make every effort to maintain the confidentiality of the student reporting the violation. However, requests for complete confidentiality may hamper the ability of the University to fully respond to the incident and restrict the University's ability to pursue disciplinary action. Furthermore, the University may determine that its requirement to provide a safe, non-hostile, and nondiscriminatory environment for all students supersedes the confidentially request of the student reporting the violation. Evaluations of requests for confidentiality will be made by the Title IX coordinator on each campus.

### **Illinois - Sexual Misconduct Definitions**

#### *Consent*

Consent is freely given agreement to the act of sexual penetration or sexual conduct in question. Lack of verbal or physical resistance or submission by the victim resulting from the use of force or threat of force by the accused shall not constitute consent. Silence is not consent. The absence of refusal is not consent. The manner of dress of the victim at

the time of the offense shall not constitute consent. A person who initially consents to sexual penetration or sexual conduct is not deemed to have consented to any sexual penetration or sexual conduct that occurs after he or she withdraws consent during the course of that sexual penetration or sexual conduct. An individual who is impaired due to alcohol or drug ingestion cannot give consent.

#### *Dating Violence*

Dating violence means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.

#### *Domestic Violence*

Domestic violence includes asserted violent misdemeanor and felony offenses committed by the victims current or former spouse, current or former cohabitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.

#### *Force or threat of force*

Force or threat of force means the use of force or violence or the threat of force or violence, including, but not limited to, (1) when the accused threatens to use force or violence on the victim or on any other person, and the victim under the circumstances reasonably believes that the accused has the ability to execute that threat; or (2) when the accused overcomes the victim by use of superior strength or size, physical restraint, or physical confinement.

#### *Sexual Abuse*

A person commits criminal sexual abuse if that person: (1) commits an act of sexual conduct by the use of force or threat of force; or (2) commits an act of sexual conduct and knows that the victim is unable to understand the nature of the act or is unable to give knowing consent.

#### *Sexual Assault*

Sexual assault is:

An act of sexual penetration under the use or threat of force; or

or  
An act of sexual penetration where the accused knows that the victim is unable to understand the nature of the act or is unable to give knowing consent; or

An act of sexual penetration in which the accused delivers (by injection, inhalation, ingestion, transfer of possession, or any other means) any controlled substance to the victim without the victims consent or by threat or deception for other than medical purpose; or

An act of sexual penetration on a victim under the age of consent by Illinois definition.

#### *Sexual Conduct*

Sexual conduct means any knowing touching or fondling by the victim or the accused, either directly or through clothing, of the sex organs, anus, or breast of the victim or the accused

or any part of the body of a child under 13 years of age or any transfer or transmission of semen by the accused upon any part of the clothed or unclothed body of the victim, for the purpose of sexual gratification or arousal of the victim or the accused.

#### *Sexual Harassment*

Sexual harassment is a form of harassment that may involve the behavior of a person of either sex against a person of the opposite or same sex, and occurs when such behavior constitutes unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal or physical behavior of a sexual nature where:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's education or employment;
2. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting the individual's welfare; or
3. Such conduct has the purpose or effect of substantially interfering with an individual's welfare, academic or work performance, or creates an intimidating, hostile, offensive, or demeaning education or work environment.

#### *Sexual Penetration*

Sexual penetration means any contact, however slight, between the sex organ or anus of one person and an object or the sex organ, mouth, or anus of another person, or any intrusion, however slight, of any part of the body of one person or of any animal or object into the sex organ or anus of another person, including, but not limited to, cunnilingus, fellatio, or anal penetration. Evidence of emission of semen is not required to prove sexual penetration.

#### *Stalking*

A person commits stalking when he or she knowingly engages in a course of conduct directed at a specific person, and he or she knows or should know that this course of conduct would cause a reasonable person to: (1) fear for his or her safety or the safety of a third person; or (2) suffer other emotional distress.

### **Arizona - Sexual Misconduct Definitions**

#### *Domestic Violence*

Domestic violence means any act which is a dangerous crime against children as defined in section 13-705 (dangerous crimes against children) or an offense defined in section 13-1201 through 13-1204 (endangerment, threatening or intimidating, assault, aggravated assault), 13-1302 through 13-1304 (custodial interference, unlawful imprisonment, kidnapping) 13-1502 through 13-1504 (criminal trespass in the third, second and first degree) or 13-1602, (criminal damage); section 13-2810 (interfering

with judicial proceedings), section 13-2904, subsection A, paragraph 1, 2, 3 or 6 (disorderly conduct), section 13-2916 (use of telephone to terrify, intimidate, threaten, harass, annoy or offend) or section 13-2921 (harassment), 13-2921.01 (aggravated harassment;), 13-2923 (stalking), 13-3019 (surreptitious photographing, videotaping, filming or digitally recording or viewing), 13-3601.02 (aggravated domestic violence ) or 13-3623 (child or vulnerable adult abuse), if any of the following applies:

1. The relationship between the victim and the defendant is one of marriage or former marriage or of persons residing or having resided in the same household.
2. The victim and the defendant have a child in common.
3. The victim or the defendant is pregnant by the other party.
4. The victim is related to the defendant or the defendant's spouse by blood or court order as a parent, grandparent, child, grandchild, brother or sister or by marriage as a parent-in-law, grandparent-in-law, stepparent, step-grandparent, stepchild, step-grandchild, brother-in-law or sister-in-law.
5. The victim is a child who resides or has resided in the same household as the defendant and is related by blood to a former spouse of the defendant or to a person who resides or who has resided in the same household as the defendant.

#### *Oral Sexual Contact*

Oral sexual contact means oral contact with the penis, vulva, or anus.

#### *Sexual Abuse*

A person commits sexual abuse by intentionally or knowingly engaging in sexual contact with any person who is fifteen or more years of age without consent of that person or with any person who is under fifteen years of age if the sexual contact involves only the female breast.

#### *Sexual Assault*

A person commits sexual assault by intentionally or knowingly engaging in sexual intercourse or oral sexual contact with any person without consent of such person.

#### *Sexual Conduct*

Sexual contact means any direct or indirect touching, fondling or manipulating of any part of the genitals, anus or female breast by any part of the body or by any object or causing a person to engage in such contact.

#### *Sexual Harassment*

Sexual harassment is a form of harassment that may involve the behavior of a person of either sex against a person of the opposite or same sex, and occurs when such behavior

constitutes unwelcome sexual advances, unwelcome requests for sexual favors, and other unwelcome verbal or physical behavior of a sexual nature where:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's education or employment;
2. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting the individual's welfare; or
3. Such conduct has the purpose or effect of substantially interfering with an individual's welfare, academic or work performance, or creates an intimidating, hostile, offensive, or demeaning education, or work environment.

#### *Sexual Intercourse*

Sexual intercourse means penetration into the penis, vulva, or anus by any part of the body or by any object or masturbatory contact with the penis or vulva.

#### *Stalking*

A person commits stalking if the person intentionally or knowingly engages in a course of conduct that is directed toward another person and if that conduct either: 1) Would cause a reasonable person to fear for the persons safety or the safety of that persons immediate family member and that person in fact fears for the persons safety or the safety of that persons immediate family member 2) Would cause a reasonable person to fear death of that person or that persons immediate family member and that person in fact fears death of that person or that persons immediate family member.

#### *Without Consent*

Without consent includes any of the following: 1) the victim is coerced by the immediate use or threatened use of force against a person or property. 2) The victim is incapable of consent by reason of mental disorder, mental defect, drugs, alcohol, sleep or any other similar impairment of cognition and such condition is known or should have reasonably been known to the defendant. For purposes of this subdivision, "mental defect" means the victim is unable to comprehend the distinctively sexual nature of the conduct or is incapable of understanding or exercising the right to refuse to engage in the conduct with another. 3) The victim is intentionally deceived as to the nature of the act. 4) The victim is intentionally deceived to erroneously believe that the person is the victim's spouse.

#### **Reporting Sexual Misconduct:**

All complaints will result in a formal investigation with a subsequent resolution. Students reporting violations have the right to file complaints with external law enforcement agencies as well as the University. University and law enforcement investigations will usually be conducted

independently and simultaneously. The University standard for determining the validity of a complaint is the 'preponderance of evidence' standard. Investigations of student complaints that involve another student or students will be undertaken by the Dean of Students- Title IX coordinator; however, investigations involving student complaints against a MWU employee(s) or employee(s) complaints against a student are undertaken jointly by the Dean of Students-Title IX coordinator and the Director of Human Resources. Student complaints concerning non-sexual harassment and unlawful discrimination are governed under the Student Handbook's section on Harassment and Unlawful Discrimination, which can be found in the Policies Section of the Student Handbook. Students who are charged with sexual misconduct are in violation of the University's "Code of Responsibilities of the Students of Midwestern University" as stated in Appendix 1 and of the University's "Bylaws and Regulations of the Code of Responsibilities and Rights of the Student of Midwestern University" stated in Appendix 2 of this handbook and can be disciplined under the judicial proceedings stated in Appendix 2, Section 4 of the Student Judicial System. Disciplinary sanctions imposed by the University on students may include, but are not limited to, disciplinary warning, disciplinary probation, suspension, or dismissal. Students charged with violations may also be prosecuted under Illinois or Arizona criminal statutes. Employees will be disciplined according to University Human Resources guidelines.

#### **Procedure:**

##### **Initiating an investigation of sexual misconduct:**

To institute proceedings regarding allegations of sexual misconduct, the following procedures shall be followed:

1. Nature of the act and related circumstances are to be reported in written detail and submitted to:
  - The involved student(s) or employee(s),
  - The appropriate College Dean, and
  - The Dean of Students.
2. The written statement must include the name of the involved student or employee, the name and status of the reporting person, and the nature of the alleged act. The confidentiality of the student reporting the violation will be maintained if possible. The written statement may be sent to the involved student via the University email/mail system or delivered in person. Should a student so involved refuse or fail to accept delivery of the statement after a bona fide attempt is made to deliver, the requirement of notification will be considered to have been met. All correspondence related to the proceedings is considered to be confidential material. Correspondence to employees will be handled via Human Resources.
3. Temporary suspension: Should a student action be of such a nature that it is felt that he/she must be



relieved of his/her right to attend Northwestern University, the student may be temporarily suspended from the college on recommendation of the Dean of Students. Any temporary suspension may continue until such time as the issue in dispute is resolved under the process outlined below. Suspension of employees will be handled by Human Resources.

#### *Resolution of conduct matter*

Any issue concerning student conduct will be resolved by utilizing the office of the Title IX Coordinator (Dean of Students). The Title IX Coordinator is authorized to receive complaints regarding sexual misconduct, conduct investigations and determine the validity of the charges. The Title IX Coordinator also makes recommendations regarding appropriate disciplinary action to the applicable Academic Dean. The Dean of Students has been assigned this role to ensure consistent and fair resolution of student conduct issues. In sexual misconduct cases involving a student(s) and an employee(s) of the University, the investigation will be jointly conducted by the Title IX Coordinator (Dean of Students) and the Director of Human Resources. Complaints against vendors will be conducted by the Title IX Coordinator in the same fashion as a student complaint.

#### *Method of resolution*

1. Upon receipt of the written complaint lodged against the student, the Title IX Coordinator will set a time to meet with the student charged with the violation regarding the issue. The interview will preferably be conducted in person, although a phone interview is acceptable if the student is at a distant location. The Title IX Coordinator has the right to interview other parties in relation to the incident to determine the validity of the complaint. The student filing the complaint will also be interviewed. Both the student filing the complaint and the accused student have the right to have an advisor present during all meetings/interviews/proceedings.
2. After interviewing the student accused of the violation, the student filing the complaint and other involved persons, the Title IX Coordinator will render a decision regarding the validity of the complaint. The validity will be based upon whether it was more likely than not that the incident occurred (preponderance of the evidence standard). If the complaint is deemed valid, the Title IX Coordinator will recommend disciplinary action for the accused student (s) to the appropriate Academic Dean. The Academic Dean will be notified of the recommendation within 5 school days of the aforementioned interview unless prevented by extenuating circumstances. A copy of the Title IX

- Coordinator's investigation into the complaint, including all supporting evidence, will be submitted to the Office of the President in Glendale and the Office of Accreditation in Downers Grove.
3. In a joint investigation with Human Resources, a copy of the investigation and all supporting evidence will be submitted to the Vice-President of Human Resources. If the complaint is determined to be valid and the perpetrator is an employee, the Human Resources Department will impose the appropriate sanction per HR policy. If the complaint is determined to be valid, and the perpetrator is a student, the process outlined above in subsection b in which the appropriate Academic Dean determines sanctions will be followed. A copy of the joint investigation into the complaint, including all supporting evidence, will also be submitted to the Office of the President in Glendale and the Office of Accreditation in Downers Grove.
4. Typically, within 5 school days after receiving the recommendation of the Title IX Coordinator, the Academic Dean will notify the accused student in(s) writing of his/her decision including, if applicable, any disciplinary action. Any disciplinary action must conform to Appendix 1, Section Five of the Code of Responsibilities and Rights of Students of Northwestern University. A copy of the Academic Dean's decision must be sent to the Title IX Coordinator and the Office of the President in Glendale and the Office of Accreditation in Downers Grove for inclusion in the student's disciplinary file. The student or employee reporting the violation will also be notified, in writing, of the outcome of the investigation.
5. In a joint investigation with Human Resources, the Vice-President of Human Resources will notify the accused employee in writing of disciplinary action. The student reporting the violation will also be notified, in writing, of the outcome of the investigation.
6. If the student/employee does not accept the Academic Dean/Vice-President of Human Resources' decision, the student/employee may appeal to the President within 5 school days of notification of college dean/Vice-President's decision, by submitting a written statement containing the basis and reasons for the appeal including all relevant facts. The President will request a copy of the Title IX Coordinator's findings and decision, as well as all relevant information from the investigation. Meetings with the President will be audio recorded with the permission of the student. The student may request a copy of the recording. The President will act upon the appeal by (a) confirming the original decision, (b) altering any penalties imposed, or (c) requesting the student/employee, the Coordinator, and/or the applicable college dean/Vice-President of Human

Relations to submit additional information prior to rendering a decision. Both the student/employee reporting the incident and the accused student/employee have the right of appeal utilizing the guidelines listed above. Both the student/employee reporting the violation and the accused student/employee must be notified of the outcome of the appeal in writing.

- The final decision rests with the President. A copy of the President's decision must be sent to the Academic Dean, Coordinator and the Office of the President in Glendale, and the Office of Accreditation in Downers Grove for inclusion in the student's disciplinary file.

*Record keeping in conduct matters*

Records of the above proceedings shall be kept in accordance with the following guidelines:

- All records related to disciplinary investigations/actions are secured in the Office of the Title IX Coordinator (Dean of Students).
- All records related to disciplinary appeals are secured in the Office of the President.
- All records related to disciplinary investigations/actions/appeals are maintained in perpetuity
- A student may see any and all records related to his/her disciplinary investigation/action/appeal in accordance with the college regulations concerning inspection of records as spelled out in Guidelines for Access to and Disclosure of Educational Records Maintained by Midwestern University. The identity of the student reporting the violation will be redacted, if the reporting student has requested confidentiality.
- All documentation related to disciplinary investigations/actions/appeals are kept on file in the Office of the President in Glendale and Office of Accreditation in Downers Grove in accordance with the Higher Learning Commission of the North Central Association of Colleges and Schools requirements.
- The University will disclose to the alleged victim of a crime of violence, or a non-forcible sex offense, the results of any disciplinary hearing conducted by the University against the student who is the alleged perpetrator of the crime or offense upon written request. If the alleged victim is deceased as a result of the crime or offense, the University will provide the results of the disciplinary hearing to the victim's next of kin, if so requested.

**Procedures for Reporting a Sexual Assault on Campus**

Any student who is involved in or witnesses a sexual assault should contact Campus Security immediately (Downers

Grove, dial 630/515-7111; Glendale dial 623/572-3201). Students have the option to notify law enforcement authorities, including local police, and the option to be assisted by campus authorities in notifying such authorities. It is extremely important to preserve any evidence related to the crime as may be necessary to provide proof of the assault. The student should not bathe or shower, use the restroom, change clothes, comb his/her hair, clean up the crime scene or move or touch anything the offender may have touched. If Campus Security is contacted in an emergency, they will notify the police and the Coordinator. The Manager of Residence Life will also be notified if emergencies occur within campus housing. The following is a list of emergency campus telephone numbers.

***Downers Grove Campus***

Security	7111
Police	911
Resident Advisor on Duty	(630/515-7111) Reached through Security
Dean of Students	630/515-6470

***Glendale Campus***

Security	623/572-3201
Police	911
Resident Advisor on Duty	209-1854
Dean of Students	623/572-3210

**Counseling Services for Sexual Assault Victims and Witnesses**

The University has counseling services for students who are victims of or have witnessed an act of sexual misconduct (including sexual assault, attempted sexual assault, sexual abuse, dating violence, domestic violence, or stalking). Student victims of an alleged act of sexual misconduct have options for requesting a change in academic situations and on-campus residence arrangements if such requests are reasonably available. In addition to seeking assistance from the Coordinator, students may also seek assistance from the following University personnel or outside resources:

**In Illinois:  
University Personnel**

Coordinator	630/515-6470
Manager of Residence Life	630/971-6400
Assistant Coordinator	630/515-7142
Wellness Center Personnel	630/515-7676
Student Counselor	630/515-7142

### ***Community Resources***

YWCA of DuPage - 24-Hour Crisis Hotline	630/971-3927
Family Shelter Service Hot line	630/469-5650
Northwest Action Against Sexual Assault 24-Hour Hotline	847/228-0990
<b>Mutual Ground Hotlines</b>	
24-Hour Sexual Assault Hotline	630/897-8383
24-Hour Domestic Violence Hotline	630/897-0080
Y.W.C.A.R.E.S. (South Suburban YWCA)	708/748-5672

### **In Arizona: University Personnel**

Coordinator	623/572-3329
Manager of Residence Life	623/572-3348
Associate Coordinator	623/572-3357
Assistant Coordinator	623/572-3213
Office of Student Services	623/572-3210
Student Counselor	623/572-3629

### ***Community Resources***

Glendale Police Victim Assistance Hotline	623/930-3000
Domestic Violence Hotline	1-800-799-7233
Maricopa Crisis Hotline	1-800-631-1314

### **Sexual Misconduct Education and Awareness**

Midwestern University provides educational programming that consists of primary prevention and awareness programs for all incoming students and new employees and ongoing awareness and prevention campaigns for students, faculty, and staff that:

1. Identify sexual misconduct which includes sexual harassment, sexual abuse, sexual assault or rape, domestic violence, dating violence, and stalking as prohibited conduct;
2. Define what behavior constitutes sexual harassment, sexual abuse, sexual assault or rape, domestic violence, dating violence and stalking;
3. Defines 'consent to sexual activity' under University policy and state regulations
4. Covers information on reporting sexual violence, assisting victims and survivors of sexual violence,

and preventing sexual violence through bystander training.

5. Explains rights of accuser and accused, including the right to file reports with external law enforcement agencies and the right to an advisor.

## **ACADEMIC POLICIES**

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the college/school/program Academic Policy section for additional policies that apply to students enrolled in a specific college/school/program.

### **Attendance**

The policy for class attendance is determined by each course director/coordinator. Students should refer to their course syllabus for additional attendance requirements. Students are expected to satisfy these attendance requirements in order to receive course credit.

Midwestern University encourages 100% attendance by students at all course-related sessions, lectures, laboratories, and clinical assignments. Each course director/coordinator has the prerogative to establish their own attendance requirements and policies. Unless a department's/division's policy differs, class attendance is mandatory for all students for the first session of each course in each quarter as well as on the first day of class after scheduled vacations. There is also a mandatory attendance policy for all students during clerkship/preceptorship and experiential rotations. If illness, a personal emergency, personal incapacitation, or other exceptional problem of a serious nature causes a student to be absent from a rotation or a session requiring mandatory attendance, the student must immediately notify the department/division or program responsible for the course and follow stated course policies and procedures. Unexcused absences during mandatory attendance sessions may result in course failure. Refer to specific course policies and procedures for course attendance requirements set forth by each department/division, program, or college.

### **Class Rank**

Class rank is calculated annually on July 1 for continuing students and one month before the official program/college graduation date for graduating students. Class rank may be accessed through the student's personal page at <http://online.midwestern.edu/>.

### **Classroom Visitation**

Each faculty member has the responsibility and authority to determine who, in addition to the enrolled students, may visit his or her classes. Anyone wishing to visit a class must request permission from the course director, the Department Chair/Program/Division Director, and the faculty member who is presenting the lecture.

### **Classroom/Exam Etiquette**

In order to maintain an appropriate classroom environment that is most conducive to teaching and learning, students are expected to behave in a manner that is not disruptive or disrespectful to any person and that does not adversely affect teaching or learning of any person. If cell phones need to be turned on during classroom time, then they must be set to the vibrate mode. All calls must be made/received outside of the classroom as this type of activity is disruptive to the teaching/learning environment and is disrespectful to others in the classroom. Students who do not abide by this policy may be asked to leave the classroom. Abuse of this policy could result in disciplinary procedures.

Children are not typically allowed in the classroom. Students who have an unforeseen temporary need to bring a child into the classroom must receive prior approval from the lecturer.

Students must abide by the policies and procedures of the University Testing Center when taking examinations or other assessments therein. Students must abide by the procedures of the college or department/division/program when taking examinations or other assessments on campus outside of the University Testing Center.

### **Closed Meeting Policy**

All students enrolled in Midwestern University's academic programs are considered graduate students. As such, the University holds the student accountable for his/her actions and decisions. During the student's enrollment any and all required meetings with faculty committees, faculty, or University/college administrators, are closed to only the involved student. All invited or voluntary formal or informal meetings, telephone discussions, or conference calls with faculty committees, faculty or University/college administrators are closed to only the involved student.

### **Course Auditing**

An enrolled student can audit a course under the following conditions. The student must first receive the written approval of the course director and the Department Chair/Program Director/Division Director. Once these approvals have been acquired and received by the Registrar, the student is registered for the course as an auditor and appears on the course roster. Students auditing courses are expected to attend class. An auditing student may be administratively withdrawn from a course when, in the judgment of the instructor and Department Chair/Program Director/Division Director, the attendance record justifies

such action. Academic credit is not issued to audited courses, and the possibility does not exist to change the course status from audit to full credit.

Enrolled MWU students are charged 25% of the tuition costs to audit a course.

### **Course Credit Policy**

Midwestern University has defined course credits across all colleges and programs in alignment with the federal credit hour definition: that is, one credit hour is equivalent to one hour (50 minutes) of lecture and two (2) hours of out-of-class work each week. Over a usual ten-week quarter of instruction, the following contact times are assigned for every one credit hour based on the specific type of learning activity:

- Lecture: 1 hour of lecture and 2 hours of out-of-class work for each week of instruction
- Laboratory: 2-4 hours of contact time for each week of instruction
- Case discussion, interactive group problem-solving, recitation, or workshop: 2 hours of contact time for each week of instruction
- Other activities: 3 hours of contact time. Exam time can be considered part of contact time such that an instructor has the option to count time spent on assessments as part of contact time
- Online or distance education: 3 hours of student work for each week. Student work includes reading, research, online discussion, instruction, assigned group discussion, and preparation of papers or presentations.

Some colleges or programs offer condensed courses that are offered over a shorter period of time than the usual ten-week quarter of instruction. Midwestern University follows the federal credit hour definition. The following contact times are assigned for every one credit hour based on the specific type of learning activity:

- Lecture: 10 hours of lecture and 20 hours of out-of-class work
- Laboratory: 20-40 hours of contact time
- Case discussion, interactive group problem-solving, recitation or workshop: 20 hours of contact time
- Online or distance education: 30 hours of student work. Student work includes reading, research, online discussion, instruction, assigned group discussion, and preparation of papers or presentations.

Experiential education or rotation credits are determined by different formulae depending on the college or program.

- For AZCOM, CCOM, CCP, CPG, CDMA, CDMI, CVM, AZCOPT, CCO: Each week of full time experiential education (equivalent to 40 hours of instruction) is equivalent to 1.5 credits.
- For CHS and CGS: Each week of full time experiential education (equivalent to 40 hours of instruction) is equivalent to 1 credit.

If approved, some Colleges or Programs may allow the inclusion of full-time student participation on Midwestern University - sanctioned mission trips as experiential education or rotation time. In this case, the course credit policy for experiential education or rotations applies. The minimum amount of credit per mission trip that can be applied to a stand-alone course is 0.5 credit hours.

The Curriculum Committee of the College approves the number of credits hours for all courses including those utilizing alternative delivery methods. The determination/assignment of credit hours should reflect the overall educational content of the course and the academically engaged time required to achieve the desired outcome for the typical student. Academically engaged time may be measured by the type, quantity, and required level of mastery of the course content.

#### **Course Prerequisites**

Prerequisites for courses may be established by the college/department/program that administers the course. Prerequisites are recommended to the Curriculum Committee for approval and are listed with the course description in the University Catalog.

On a case-by-case basis, prerequisites may be waived upon recommendation of the college/program Promotions, Academic Progress/Review, or Student Promotion and Graduation Committee; and with the approval of the department chair that delivers the course, and Program Director, Associate Dean or Dean of the college. In case of a conflict, the ultimate decision will be made by the Dean of the college.

#### **Final Course Grades Due**

All course directors or course coordinators must submit to the Registrar the final grades for students by the end of the day on the Tuesday following final exam week each quarter.

## **GRADE APPEALS POLICY**

### **Appeal of Non-Failing Course Grades**

A student who wishes to appeal a non-failing course grade must make the appeal to the course director within one week following posting of the grade. The course director must act upon the student's appeal within one week following receipt of that appeal. A narrative explaining the basis of the appeal must accompany the request. An appeal must be based on one of the following premises:

1. Factual errors in course assessment tools
2. Mathematical error in calculating the final grade
3. Bias

If the appeal is denied, the student has the right to appeal the decision to the course director's immediate supervisor within one week of receipt of the course director's denial. The course director's supervisor should notify the student of his/her decision within one week following receipt of the student's reappeal. The decision of the course director's supervisor is final.

### **Appeal of Course Grades Subject to Academic Review**

A student whose academic progress will be subject to review by his/her Promotion/Academic Review Committee and who wishes to appeal a grade must do so in an expedited manner prior to the scheduled meeting of the Committee. In this case, an appeal of a didactic course grade must be submitted within one business day following posting of the grade and must be based on one of the premises stated above. The course director must act on this appeal within one business day. If the appeal is denied, the student has the right to appeal the decision to the course director's immediate supervisor. The course director's supervisor should notify the student of his/her decision within one business day following receipt of the student's reappeal. The decision of the course director's supervisor is final. An appeal of a failing clinical clerkship or rotation grade must be submitted within two business days after a grade for rotation is posted. The course director must act on this appeal within two business days of receipt of the grade appeal. If the appeal is denied, the student has the right to appeal this decision to the course director's immediate supervisor. The course director's supervisor should notify the student within two business days following receipt of the student's reappeal. The decision of the course director's supervisor is final. Any extension of the time for student appeal or course director's decision must be approved by the College Dean. The student is responsible for notifying the chair of the Promotion/Academic Review Committee that a grade appeal has been filed prior to the meeting of the Committee.

All appeals and decisions must be communicated in written form.

### **Graduation Walk-Through Policy**

A walk-through candidate is defined as a student who has not satisfied academic requirements for a particular degree, but will complete all academic requirements for the degree within one quarter immediately following the official scheduled end of the academic program for his/her class.

All degree candidates for graduation and graduation walk-through candidates must be approved sequentially by the College/Program faculty, College Dean, Faculty Senate, President, and Board of Trustees.

A walk-through candidate must submit an official request to participate in a graduation ceremony and the request must be approved by the Dean four weeks prior to the ceremony.

The Dean may grant late submission of a Walk-Through Request due to unforeseen circumstances.

A graduation walk-through candidate will not receive a diploma until he/she has successfully completed all academic requirements for graduation.

### **Incomplete Grades**

The grade (I) incomplete may be assigned by a course director when a student's work is of passing quality but is incomplete or if a student qualifies for reexamination. It is the responsibility of the student to formally request an extension from the course instructor. By assigning an I (incomplete) grade, it is implied an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. To resolve an incomplete grade, an instructor will resubmit the new grade on-line. All incomplete grades must be resolved within 10 calendar days from the end of final examinations for the quarter. In the case of courses ending prior to final examination week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar. If an incomplete grade remains beyond the 10 calendar days, it is automatically converted to a grade of (F) failing by the Registrar, which signifies failure of the course.

### **In-Progress Grade**

An in-progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 days (e.g., illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter with notification of the Registrar.

### **Last Day to Add/Drop Courses**

The last day that a student may add or drop a course is Friday of the first week of the course. To add or drop any course after the course begins, a student must complete a course add/drop request which is located on the student portal at <https://online.midwestern.edu/student/mwuadddrop.cgi>

Students are able to submit "add" requests for most electives, but assistance from an academic advisor, program director or dean is required to add core courses and restricted electives. Any course "add" request submitted on behalf of a student, must first be approved by the student before it is forwarded for final approval and Registrar processing. The status of approvals and final processing can be tracked online.

Courses dropped after the first Friday of the week in which the course starts may be recorded as "W" (Withdrawal), "WF" (Withdrawal/Failing), or "F" (Failing). Grades will be

noted on the transcript in accordance with the college guidelines stated in the catalog.

### **Leave of Absence**

There are two types of leaves of absence: mandatory and voluntary. A student may be put on a mandatory leave of absence for academic, medical, or administrative reasons. Alternatively, a student may voluntarily request to take a leave of absence for bereavement, jury duty, maternity leave, medical reasons, military duty, or other personal reasons.

MWU students requesting a leave of absence must comply with the following:

1. Make an appointment with the Program Director/College Dean to discuss the leave of absence.
2. A student must provide written notification and documentation, if applicable, to the Program Director/Dean stating the reason for the leave of absence from MWU. If approved, the Dean will conditionally approve a leave of absence until all clearances are obtained.
3. The student must receive clearance of his/her leave of absence from the MWU departments on the [online.midwestern.edu](http://online.midwestern.edu) leave system within seven calendar days from the date of the Dean's approval. This time frame will allow offices such as Student Financial Services and the Registrar to process the leave of absence, prepare the required financial aid exit, and calculate the return of unearned Federal Title IV aid and all other aid, as appropriate.
4. Upon submission of all completed documentation and adherence to all clearance procedures, the Dean will provide an official letter granting a leave of absence to the student.

The student is withdrawn from all courses if the leave of absence is granted in the midst of an academic quarter. Once the Dean conditionally approves the leave, the Department Chairs/Program Director/course directors receive an automated electronic notification of the student's withdrawal. A grade of "W" (Withdrawal) or "WF" (Withdrawal/Failing) appears on the official transcript. The course director is responsible for submitting the correct grade. Students on the approved leave are obligated to pay their premium for long-term disability insurance.

All leaves of absence are granted for specific periods of time. Typically, a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. At a minimum of 30 days prior to the end of the leave period, the student is required to submit written notification to the Dean and Registrar of an intention to return. If the leave of absence was granted for medical reasons, a letter must be provided to the Dean from the treating physician verifying that the student is both

physically and mentally capable of resuming the academic program prior to registering for classes. To request an extension of a leave of absence, a student must resubmit another written notification as described above. If an individual fails to return to MWU at the agreed-upon date, the student is considered to have withdrawn from the University and must reapply for admission. Leaves of absence can only be initiated through the Office of the Dean.

Students on leaves of absence are ineligible to run for or hold student organizational/club/class offices and are not permitted to work for the University.

#### **Bereavement Leave**

Students may request a short-term leave of absence due to death of a member of the student's immediate family. The student should follow the Leave of Absence policy. Students who find it difficult to come to campus during this time to arrange a leave in person should contact the Dean immediately to make leave arrangements. The duration of the leave shall usually be up to 5 consecutive working days. The immediate family includes any of the following persons: mother, father, spouse/domestic partner, son/daughter (including stepchildren and foster children), brothers, sisters, grandparents, grandchildren, spouse's parents/grandparents, or such persons who have reared the student.

#### **Jury Duty**

Students who have been requested to appear for jury duty and cannot do so while attending classes and/or clinical rotations may bring the original jury duty request to the Office of Dean or the Office of Student Services. The College Dean or Dean of Students will give the student a letter requesting that the student be excused from jury duty. Students should be aware that individual counties/states may not excuse them from jury duty even if a letter is submitted.

#### **Maternity Leave**

Enrolled students who become pregnant can request a leave of absence for maternity reasons. The request must be in writing and sent to the College Dean; however, prior to officially requesting a maternity leave, pregnant students must contact the Office of the Dean to discuss how a leave will affect their progress in the academic program and to review options available to them. The amount of leave time granted depends largely on the personal needs of the student and the timing of the birth within the academic program. In addition, students must inform the Office of the Dean of their intentions to return to classes at least one month prior to the end of the leave of absence period. A final decision is reached after careful consideration is given to personal and professional circumstances.

#### **Medical Leave**

Enrolled students who become seriously ill can request a leave of absence for medical reasons. The request must be in writing and sent to the College Dean; however, prior to

officially requesting a medical leave the student must contact the Office of the Dean to discuss how a leave will affect their progress in the academic program and to review options available to them. The amount of leave time depends on the severity of the illness. All medical leaves require documentation from a physician/specialist, including a diagnosis and a statement as to why the student cannot continue with his/her coursework. Additional documentation from the physician/specialist that the student is medically capable of returning to classes must be submitted to the Dean at least one month prior to the end of the leave of absence period. Approval for the medical leave of absence, as well as the ability to return to classes, is reached by the Dean after careful consideration is given to the supportive medical documentation and to personal and professional circumstances.

#### **Military Leave**

Midwestern University is committed to supporting students called to active military duty. Students called to such duty will be considered on military leave. Students called to active duty should immediately notify the College Dean and provide their pertinent call-up papers. Students returning to MWU from active duty will be eligible for reinstatement as full-time MWU students once they have notified the Dean and have supplied any pertinent military papers requested by the Dean.

Students called to active military duty will be entitled to receive refunds of tuition and fees if the withdrawal is prior to the sixth week of the quarter. After the tenth week, he/she will receive both grades and credit hours for courses in which he/she is earning a passing grade.

Preclinical students with less than two-thirds of assignments/exams completed will be encouraged to restart the courses once they return. Departments, however, will have the prerogative to make special arrangements. Clinical students returning to MWU will be reinstated as closely as possible to the previous point of progress in the clinical experience. The point of entry and order of clinical rotations for the clinical student will be determined by the College Dean and by the chair of the department in which the student was doing the clinical rotation. No additional tuition will be due from students for the resumption of any "incompletes" for work that they started before leaving for active military duty. Tuition charges for students restarting classes or for subsequent academic quarters will be set at the tuition rates in effect at the time the student returns from military duty. The College Dean will provide leadership to facilitate the re-entry of students into their programs as close as possible to the point when they were called to active military duty. The Dean of Students will provide leadership to facilitate student programming to address issues of stress and personal crisis and assist students in need of counseling because of a call-up.

### **Reexamination (Retest)**

Reexamination occurs when the student fails a course, but qualifies for a reexamination. It is the prerogative of the course director to offer or not offer a reexamination for a course failure and to determine the eligibility criteria for a reexamination. If a course director has a reexamination policy, it must be stated in the course syllabus.

If a student qualifies for a reexamination, a grade of "I" must be submitted to the Registrar at the end of the quarter. The reexamination must be completed within 10 calendar days starting from the last day of final examinations for the quarter. If the student passes the reexamination, the grade of "I" will be converted to the minimum passing grade of the college/program. If the student fails the reexamination, the grade of "I" will be converted to a grade of "F".

### **Registrar**

The Registrar maintains, prepares, and verifies all academic records, grades, and transcripts. The main number of the Office of the Registrar is 630/515-7600 (Downers Grove Campus) and 623/572-3325 (Glendale Campus). Registrar services can be accessed at <https://www.midwestern.edu/registrar>.

### **Registration**

Registration is done automatically for all students by the University Registrar. Exceptions to this rule include students registering for special schedules (extended course of study) and electives. Students registering for special schedules should contact the Office of the Dean, CHS Program Director's Office or CGS Program Director's Office, if applicable, for assistance.

### **Retake**

A retake may be offered when formal repetition of an entire course or a portion of the course is required due to course failure, or in the College of Health Sciences when a "C" letter grade has been earned. A course may be retaken when any of the following occur:

1. No reexamination is offered by the department.
2. The student has failed the reexamination.
3. The student fails to meet eligibility criteria for reexamination, if offered by the course director.

It is the decision of the Student Promotion and Graduation/Preclinical Promotions/Clinical Promotions/Academic Review Committee of each college/school/program to recommend a retake of a course. The committee, in conjunction with the approval of the department chair, program director and/or course coordinator, will determine the nature of the retake and the timeframe for completion of the repeated course. The course may be repeated at MWU or at an outside institution, if offered. The options for repeating a course at MWU may

include a directed readings remedial course with examination, repeating the course in its entirety the next academic year, or taking a specially designed course that contains the appropriate student work hours needed to meet the credit hours of the failed course. The repeat course must be completed in a regularly scheduled quarter. In either case, the student must be registered for the course and will be charged a flat rate of \$1,500 per quarter for retake courses, individually or in aggregate, that total one to five credit hours and \$3,000 per quarter for retake courses, individually or in aggregate, that total six credits or more. The Student's Dean or Program Director will issue a Course Retake Plan Letter to the Student specifying the courses included in the Course Retake Plan. Only the courses in the Course Retake Plan Letter qualify for the retake tuition rate. Retake courses may be taken with additional non-retake courses during the same quarter. Applicable tuition rates will be applied to non-retake courses. A student will not be charged more than the full-time per quarter tuition rate during any quarter, except in the instance of course overload situations, including while completing a retake course or courses. The maximum allowable grade that can be earned as a course retake is determined by college policy.

A course at an outside institution that is eligible as a replacement for the course that the student failed at MWU, must be approved by the department or program that offers the course at MWU as a satisfactory replacement for the failed course. A student must earn a minimum grade of "C" (not C-) in a replacement course completed at an outside institution and submit an official transcript to the Dean/Program Director in order to apply the credit toward the degree requirements of the college or program. Students are responsible for all costs associated with repeating a failed course at another institution.

### **Retention of Tests or Written Assignments**

Instructors will retain examinations or written assignments not returned to students for a period of one quarter after course completion. After that time, materials are destroyed.

### **Transcripts and Duplicate Diplomas**

The University releases transcripts and duplicate diplomas upon receipt of a request from a student or graduate. All requests should be submitted through the Document Request Center (<http://online.midwestern.edu>.)

1. No phone requests are honored.
2. Allow one week for processing.
3. There is no charge for a transcript release for MWU students prior to graduation; however, graduates and transferring students are required to pay a nominal amount per official transcript release.
4. Individuals who are no longer students at MWU are charged the same rate as an alumnus.



5. Transcripts and diplomas will not be issued for any student with a past-due account balance with MWU or the MWU Clinics.
6. Transcripts and diplomas will not be issued for any student or alumnus who has not completed a financial aid exit interview, if aid was borrowed while attending MWU.

A graduate can request a duplicate wall diploma through the online student/alumni portal. For current pricing on transcripts and diplomas, please refer to the Registrar website at [www.midwestern.edu/registrar](http://www.midwestern.edu/registrar)

### Travel and Lodging for Clinical Education/Fieldwork

It is the student's responsibility to assure that he/she has made appropriate arrangements for lodging and transportation to/from clinical education/rotation/fieldwork sites throughout the curriculum. The University does not generally provide for the cost of transportation and lodging. Travel arrangements are the sole responsibility of the students. Students are not considered an agent or an employee of the University and are not insured for any accidents or mishaps that may occur during any traveling that is done as part of the student's professional program. Students are usually responsible for all expenses associated with clinical education, such as transportation, meals, housing, professional attire, laboratory fees, etc.

## WITHDRAWAL

### Withdrawal from One or More Courses

Any student who wishes to withdraw from one or more courses must first discuss their decision with their course director(s) and/or advisor, then submit a course add/drop request online at <https://online.midwestern.edu/student/mwuadddrop.cgi>. No course may be dropped after the last day of the course. No withdrawals are allowed during the final examination period. The course director is responsible for submitting the correct grade or grade notation. Withdrawal requests must be approved by the program director, if applicable, and/or by the college dean. Approval for withdrawal from a core curriculum course is granted only for extraordinary circumstances. Students should be aware that withdrawal from a core course may result in a significant extension of the students' professional program and may alter financial aid assistance. Approved course withdrawals are graded according to the following policy:

Time at Which Course Withdrawal is Requested	Course Grade at the Time of Withdrawal	Action
Prior to and including the first Friday of the course	N/A	No grade - course does not appear on the transcript
After the first Friday and up to 50% of the course duration is completed	N/A	W
Greater than 50% and up to 80% of the course duration is completed	Passing Failing	W WF*
Greater than 80% of the course duration is completed	Passing Failing	W WF* or F

\*A "WF" may be considered a failure by an Academic Review/Promotion Committee. In the case of courses that span two or three full quarters with a single grade assigned at the end of the course, students may withdraw from the course during any of the quarters in which the course is administered. If the assigned grade at the time of withdrawal is a "WF", the grade of "WF" will be considered a grade equivalent for all completed quarters of the course as well as the quarter during which the withdrawal was initiated.

### Withdrawal from the College/University

The decision to withdraw from the University is a serious matter. Any student who withdraws from a college or a program is dropped from the rolls of the University. As such, if he/she decides at some later date to reenter the program, he/she must reapply for admission and, if accepted, assume the status of a new student.

Students contemplating withdrawal must inform the Program Director, if applicable, and the Dean of the decision to voluntarily withdraw and voluntarily relinquish his/her position in the program. The student must contact the Office of the Dean and must complete the appropriate clearance procedures. The withdrawal process includes the clearing of all financial obligations of MWU (including the mailroom, clinical education, library, security, housing, etc.) and a financial aid exit interview. If the withdrawal occurs before the completion of a course, the student must complete a course add/drop form. The student will receive one of the following grades: "W" (Withdrawal) or "WF" (Withdrawal/Failing) or "F" (Failing). If the student

completes the course before withdrawing, a final grade will be assigned. Following completion of these withdrawal procedures, the designation "Withdrawal" will be placed in the student's permanent record. The designation "Unofficial Withdrawal" is placed in the permanent record of any student who withdraws from his/her program without complying with the above procedures. For more information, see the Financial Aid sections on Notification of Withdrawal and Tuition Refund Policies.

## ADMISSIONS

Prospective students interested in enrolling in any college of Northwestern University should contact the Office of Admissions at either the Downers Grove or the Glendale campuses to request admissions information and application materials. For specific admission standards of the respective colleges, refer to the appropriate college sections of the catalog.

Office of Admissions	Office of Admissions
<b>Midwestern University</b>	<b>Midwestern University</b>
555 31st Street	19555 North 59th Avenue
Downers Grove, IL 60515	Glendale, AZ 85308
630/515-7200	623/572-3215
800/458-6253	888/247-9277
AdmissIL@midwestern.edu	AdmissAZ@midwestern.edu

### Admission Deferment

Deferments are only considered under extreme circumstances in which a physical illness or medical condition of the applicant or their immediate family member precludes the student from beginning classes at the start of the academic year. For the 2020-2021 academic year only, deferments may also be considered for an international student who is unable to obtain an F-1 visa due to the declaration of a global pandemic. If granted by the Dean, a student may defer their admission for one year only.

To initiate the deferred admissions process, a student must request a deferment in writing to the Director of Admissions by the date designated in their matriculation agreement. For deferments requests related to physical illness, the request must be accompanied by a letter(s) from a physician(s) documenting the conditions that prevent the student from beginning their full time studies. Once all appropriate documentation has been received, the Director of Admissions will forward it to the Dean for review. The Director of Admissions may provide a recommendation on the deferment to the Dean.

The Dean will respond to a written request with a letter to the student detailing the specific conditions associated with

the deferment including the start and end dates of the approved deferment period. Typically, the conditions include:

- At the time of the deferral request, the student must submit their deposit monies by the deposit deadline date designated in the matriculation agreement.
- The student must provide a written letter to the Dean in which he/she states his/her intent to end the deferment and to begin classes. This letter must be received by the Dean a minimum of 30 days prior to the start of classes.
- For deferments due to physical illness or medical conditions of the student, the student must provide a letter from a physician(s) stating that the student can begin full time studies. The letter must be submitted to the Dean at least 30 days prior to the start of classes.

Students that have been granted a deferment are not required to re-apply.

### Articulation Agreement Between Northwestern University Programs

At the time of application, students enrolled in a Northwestern University program are guaranteed an admission interview with another Northwestern University program if the student:

1. Is in good standing in the academic program in which the student is currently enrolled or has completed the program within the last 12 months prior to the application and does not have any pending misconduct charges against him/her;
2. Meets all admission requirements for the professional program of interest;
3. After a minimum of two full-time quarters of study, achieves a minimum Northwestern University grade point average, derived from all courses completed at Northwestern, that is equal to or greater than 3.0; and
4. Achieves a score on the professional entrance exam that is not less than one standard deviation below the mean score for students who matriculated into the professional degree program in the previous year.

Note: Students must meet all application deadlines for the professional program of interest. A guaranteed interview does not guarantee admission into the professional program.

### International Applicants

An international student must complete a minimum of 30 semester hours of coursework from a regionally accredited college or university in the United States, or from a recognized post-secondary Canadian institution that uses English as its primary language of instruction and documentation. Of the 30 semester hours, 15 hours must be

in the sciences, 6 hours in non-remedial English composition, and 3 hours in speech/public speaking.

Applicants who wish to receive credit for prerequisite coursework completed outside the U.S. or at a Canadian institution that does not use English as its primary language of instruction and documentation must submit an official, detailed, course-by-course evaluation obtained from one of the following evaluation services:

- Education Credential Evaluators (ECE): 414/289-3400 ([www.ece.org](http://www.ece.org), e-mail: [eval@ece.org](mailto:eval@ece.org))
- World Education Service (WES): 212/966-6311 ([www.wes.org](http://www.wes.org))
- Josef Silny & Associates International Education Consultants: 305/273-1616 ([www.jsilny.org](http://www.jsilny.org), e-mail: [info@jsilny.org](mailto:info@jsilny.org))

International applicants who do not provide documentation of acceptable U.S. or Canadian course/degree equivalency will not receive credit, and will be required to complete all prerequisite courses at an accredited college or university in the United States, or at a recognized post-secondary institution in Canada that uses English as its primary language of instruction and documentation.

For clarification about recognized post-secondary institutions in Canada that use English as a primary language of instruction and documentation, international applicants should contact the Midwestern University Office of Admissions.

### **Matriculation Process**

The matriculation process begins after applicants receive notification of their acceptance. To complete the matriculation process, applicants must:

1. Submit the matriculation agreement and required deposit monies by the date designated in the matriculation agreement. Deposits are applied towards the first quarter's tuition.
2. Submit official final transcripts from all colleges attended post-high school by the deadline of two weeks (14 days) prior to the first day of classes. Students who are accepted to MWU less than one month prior to the first day of classes will have 30 calendar days from the date of their acceptance to submit all official transcripts to the Office of Admissions. Any special circumstances or requests for exceptions to this policy must be sent to and approved by the Office of the Dean of the College. Students who fail to submit all official final transcripts by the stated deadline may jeopardize their acceptance or continued enrollment in the College.
3. Submit completed medical files documenting completion of a physical exam, immunizations,

tuberculosis and titer blood testing as instructed by the Office of Student Services and detailed in the Student Handbook.

4. Meet the Technical Standards for the College.
5. Submit proof of medical and disability insurance coverage. Students may select either a plan offered by an MWU-approved carrier or a comparable plan offered by an outside carrier of their choice, as determined by the Office of Student Services. Insurance must be maintained throughout the entire period of enrollment.
6. Submit additional documents as requested by the Office of Admissions or College.
7. Students who are requesting an F-1 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the first year of their educational program 6 weeks before the first day of the first quarter of each academic year. Furthermore, the student must prepay tuition and in some cases other mandatory program fees for each successive year at the start of each academic year on the University's stated due date.
8. Submit a signed Credit Policy Statement.
9. Authorize and pass the MWU criminal background check and/or fingerprinting background check as required by the specific College/School/Program.
10. Submit a signed MWU Drug-Free Workplace and Substance Abuse Policy Statement.

Applicants who fail to satisfy these matriculation requirements or who omit or falsify information required on official admission documents automatically forfeit their seat in the program. Any individual accepted for admission to the College/Program who does not comply with stated timelines for submission of all required materials will be notified by the College/Program regarding missing materials and the potential forfeiture of his/her seat.

## **STUDENT SERVICES**

The mission of the Office of Student Services is to offer a broad range of services in the arena outside the formal boundaries of the classroom that support, enhance, nurture, and promote the growth and development of Midwestern University students by contributing to their professional, cultural, social, intellectual, physical, and emotional well being. It is within the mission of Student Services to promote awareness, understanding, and acceptance of all individuals in a diverse world society and to promote a sense of respect, appreciation, and community among the colleges that can be carried on throughout students' professional lives.

The Office of Student Services on the Downers Grove Campus is composed of the Dean of Students, Assistant Deans, Student Activities, Residence Life, Student Counseling Center, the Wellness Center and Campus

Recreation. The Office of Student Services supports all colleges and interacts with students to develop and support programs and services that enrich students' experiences on campus. Examples of these programs include: MWU Student Government, MWU Student Tutoring Program, student social and recreational activities, orientation, academic counseling, stress and time management seminars, multicultural and diversity programming, crisis intervention and personal counseling, intramural sports, and other developmental activities. The Office of Student Services, housed in The Commons and Recreation and Wellness Hall, has an open-door policy and is available to students on a continuing basis offering the support, advice, and encouragement needed to meet students' concerns and challenges.

### **New Student Orientation**

Orientation programs are planned each year to welcome and facilitate the integration of new students into each of the colleges of the University. In addition, students are provided with opportunities to interact socially with peers, meet faculty, administration, and staff members, learn about University services available on campus and develop a sense of belonging to the University community as well as individual college communities.

### **Student Government**

Student government provides a forum for discussing and resolving student concerns, initiating recognition of new student organizations, and conducting reviews of existing student organizations. Student government functions at two levels: (1) the University and (2) the College. The following is a brief description of how student government functions at both levels.

#### *University Level*

All students are represented through a campus-wide Student Senate. The Student Senate is composed of representatives from CCOM, CCP, CHS, CGS, CDMI, and CCO. The members of the Executive Board are the Speaker of the Student Senate, the Vice Speaker, and the Secretary. Meeting every month, the Student Senate provides a mechanism for governance of campus-wide activities and functions. It also provides a vehicle for the exchange of ideas and perceptions concerning student issues that cross college lines.

#### *College Level*

Individual college student councils/student government associations function to provide governance for student issues related to the individual colleges, as well as conducting all class and college-wide elections. Adoption of bylaws governing the individual college student councils/student government associations is at the discretion of the elected/appointed officers of these councils/associations. College student councils/student government associations are

encouraged to adopt bylaws that are consistent with the bylaws of the governing bodies of the other colleges.

### **Student Organizations**

Student organizations are recognized by the Student Senate, respective student councils/student government associations, and the Dean of Students. Students interested in obtaining more information about existing organizations or having any questions concerning how to apply for membership should contact the president(s) of the respective organization(s). A listing and description of each organization is found in the Student Handbook.

### **Student Counseling Center**

The Downers Grove Campus has both full-time and part-time Student Counselors. The Student Counselors are available to help students at Midwestern University effectively deal with many issues through individual, couples and family counseling.

Counseling by the on-campus Student Counselors is subsidized through student activity fees and is provided free of charge to all students of Midwestern University. Based on assessment by the counselors, it may be necessary at times to utilize alternate resources for specialized interventions. Referrals will be made to an appropriate specialist; however, these referrals may or may not be covered under the student's health plan. Under these circumstances the student is required to meet expenses not covered under their health plan.

### **Student Tutor Program**

Through the Office of Student Services, Midwestern University offers peer-tutoring services to those students having academic difficulty. Tutoring is designed to enhance test-taking skills, modify study habits and facilitate focus on critical material and content.

### **Student Health**

As deemed appropriate for the protection of students and patients, and in accordance with our clinical affiliation agreements, Midwestern University requires that all students submit to a physical exam and provide documented proof of immunity against certain diseases prior to and during their enrollment.

### **Wellness and Recreation Hall**

Committed to the concept of wellness, Midwestern University encourages students to utilize the facilities available in the Wellness and Recreation Hall. These facilities include a craft room, a music room, gymnasium, a fully equipped weight room, an aerobic exercise room, racquetball/handball courts and athletic fields for various intramural sports.

Additionally, students may participate in numerous activities sponsored by the University, including volleyball, soccer, basketball, dodgeball and softball competitions, and group

activities such as yoga, sewing, knitting, beading, stained glass making and varied aerobic classes.

### **Health Clinic Services**

Students can find full service primary care at Midwestern's Family Practice Clinic at the Multispecialty Clinic. Here students may have a visit with one of the two physicians or with the Physician Assistant. Care includes physicals, acute illnesses and injuries, chronic diseases, gynecological care/pap tests, contraception, weight loss support, osteopathic manipulation, and minor procedures like wart cryotherapy and skin biopsies.

Midwestern's student health requirements are also available at the Family Practice Clinic including immunizations, titers, and TB testing.

## **OFFICE OF STUDENT FINANCIAL SERVICES**

### **Introduction**

The Office of Student Financial Services provides students with information about federal, state, and private sources of financial assistance; helps students coordinate the financial aid application and renewal processes; and assists students in making informed decisions about the financing of their education. The Office of Student Financial Services is also responsible for the billing and collection of all tuition, fees, and institutional housing owed for each quarter.

Midwestern University has a very strong commitment to financial literacy through the "Sensible Strategies" program. While many students make substantial, long term financial obligations for their professional education, we are committed to assisting our students to become smart, informed consumers through a variety of student-focused programs and events.

### *Financial Aid Disclosure*

Changes in federal, state and/or university policies could affect the Office of Student Financial Services' information printed in this catalog. MWU reserves the right to make changes in any or all of the information contained therein and to apply such revision accordingly.

### **Contact Information**

Students may contact us by calling 630-515-6101 Monday through Friday between the hours of 8:00 AM and 4:30 PM (Central Standard Time) or by e-mailing financial aid at [ilfinaid@midwestern.edu](mailto:ilfinaid@midwestern.edu) or student accounts at [ilstudentaccounts@midwestern.edu](mailto:ilstudentaccounts@midwestern.edu).

Midwestern University  
Office of Student Financial Services  
Haspel Hambrick Hall, Suite 102  
555 31st Street  
Downers Grove, IL 60515

### **General Eligibility Requirements**

All students seeking financial aid must meet general eligibility requirements regarding citizenship, selective service, financial need, and satisfactory academic progress. Students must also complete several certification statements.

Students who are currently in default and have not made satisfactory loan repayments or owe a refund on a Title IV program do NOT qualify for any form of federal aid. Students who have an established history of debt nonpayment may qualify for Federal loan programs but do NOT qualify for campus-based aid.

### **Loss of Eligibility Due to a Drug Conviction**

A student who is convicted of a state or federal offense involving the possession or sale of an illegal drug that occurred while enrolled in school and receiving Title IV aid is not eligible for Title IV funds. The passage of the Illinois Cannabis Regulation and Tax Act in 2019, which legalizes certain activities related to marijuana under Illinois state law effective Jan. 1, 2020, does not affect federal law or the university's marijuana prohibition. Midwestern University prohibits the possession, use, distribution, dispensation, sale or manufacture of marijuana on University property; and violation of it will be grounds for loss of federal financial aid eligibility.

A borrower's eligibility is based on the self-certification on the Free Application for Federal Student Aid (FAFSA). Convictions that are reversed, set aside, or removed from the student's record, or a determination arising from a juvenile court proceeding do not affect eligibility and do not need to be reported by the student.

A student convicted of a drug-related offense while enrolled in school, and receiving Title IV aid, loses Title IV eligibility as follows:

1. For the possession of illegal drugs:
  - First offense: one year from the date of conviction
  - Second offense: two years from the date of the second conviction
  - Third offense: indefinite period
2. For the sale of illegal drugs:
  - First offense: two years from the date of conviction
  - Second offense: indefinite period

A school must provide a student who loses Title IV eligibility due to a drug-related conviction with a timely, separate, clear and conspicuous written notice. The notice must advise the student of his or her loss of Title IV eligibility and the ways in which the student may regain that eligibility.

### **Regaining Eligibility after a Drug Conviction**

A student regains eligibility the day after the period of ineligibility ends following a first or second offense; or when the student successfully completes a qualified drug rehabilitation program that includes passing two unannounced drug tests given by such a program. A student will become ineligible as a result of any further drug convictions.

Students denied eligibility for an indefinite period can regain eligibility after completing any of the following three options:

1. Successfully completing a rehabilitation program (as described below, which includes passing two unannounced drug tests from such a program);
2. Having the conviction reversed, set aside, or removed from the student's record so that fewer than two convictions for sale or three convictions for possession remain on the record; or
3. Successfully completing two unannounced drug tests which are part of a rehab program (the student does not need to complete the rest of the program).

A drug rehabilitation program is considered approved for these purposes if it includes at least two unannounced drug tests and meets one of the following requirements:

- The program received or is qualified to receive funds directly or indirectly under a federal, state or local government program.
- The program is administered or recognized by a federal, state or local government agency or court.
- The program received or is qualified to receive payment directly or indirectly from a federally or state licensed insurance company.
- The program is administered or recognized by a federally or state-licensed hospital, health clinic, or medical doctor.

When a student regains eligibility during the award year, MWU may award campus-based aid for the current payment period (quarter) and Direct Loans for the period of enrollment (academic year).

### **Financial Aid**

The Office of Student Financial Services helps coordinate four types of financial aid: Scholarships, Federal Work-Study, Veterans' Educational Benefits, and Loans.

### **Federal Work-Study**

Student employment is available to eligible students who apply for work-study and demonstrate financial need by completing a FAFSA for the applicable award year. Qualifying students may work on campus, or off-campus if performing community service activities or research. A contract must be in place prior to working off-campus. The

Office of Student Financial Services determines the total amount students may earn annually. This is NOT a loan program. Students who obtain Federal Work-Study employment are paid bi-weekly. Awards are based on allocations of federal funding. Students may not start work as a Federal Work-Study student without first receiving approval from Student Financial Services.

### **Federal Student Loans**

#### **All Programs**

1. Direct Unsubsidized Loan: Graduate students enrolled at least half-time in a degree seeking program may borrow up to \$20,500 per academic year with an aggregate maximum of \$138,500. Students enrolled in the osteopathic medicine, veterinary medicine, dental medicine, optometry, podiatry, clinical psychology and pharmacy programs are eligible for higher annual loan amount and may borrow the aggregate loan maximum of \$224,000. Current information on interest rates, loan fees and repayment plans for Federal Direct Loans is available at: <https://studentaid.gov/understand-aid/types/loans/interest-rates>
2. Direct Graduate PLUS Loan: Graduate students enrolled at least half-time in a degree seeking program may borrow up to the annual cost of attendance minus other aid. Current information on interest rates, loan fees and repayment plans for Federal Direct Loans is available at: <https://studentaid.gov/understand-aid/types/loans/interest-rates>

#### *Dentistry, Optometry, and Pharmacy*

Health Professions Student Loan (HPSL): Graduate students enrolled full time in a degree-seeking program in dentistry, optometry, podiatry or pharmacy may be eligible for HPSL funding. Priority consideration is given to third and fourth-year students with exceptional financial need based on both student and parent income. HPSL is administered by the Department of Health and Human Services. Award amounts are determined according to number of applicants and availability of funds. HPSL is a subsidized loan with a 5% fixed interest rate and a 12-month grace period before interest accumulates. Students must be enrolled full-time to receive HPSL funding.

#### *Osteopathic Medicine Program*

Primary Care Loan (PCL): Priority consideration is given to certain third or fourth-year students with exceptional financial need who are committed to practicing primary care medicine. This loan offers a

one-year grace period and a residency deferment of up to four years. The interest rate is fixed at 5%. Students must agree to enter and complete a residency training program in primary care medicine not later than four years after the date on which they graduate. Students must also agree to practice primary care medicine through the date on which the loan is repaid in full. Students must be enrolled full-time to receive PCL funding.

## Scholarships

### All Programs

MWU has a variety of scholarships available to current students. Please check the Student Financial Services scholarships webpage for a complete listing of available scholarships.

### Medical Programs

The CCOM Scholarship Fund: CCOM awards scholarships based on a student's academic achievement, exceptional financial need, and motivation toward osteopathic medicine (extracurricular activity involvement at CCOM). The number and amount of this award varies per year. Students are notified by the Office of Development and Alumni Relations or the CCOM Scholarship Committee when applications become available.

### Non-Federal Student Loans

#### *Osteopathic Medicine Institutional Loan Programs*

CCOM/AZCOM Loan: This institutional loan program is offered to third and fourth-year students. Loan amounts and the availability of funding vary from year to year. Interest will accrue at 5% per annum immediately after graduation unless the student enters into an approved internship. Repayment begins 6 months after graduation, unless the student enters into an approved internship/residency.

#### *Other Resources:*

Many lenders also offer private loans to students to supplement their federal financial aid. Such loans are not subject to federal student loan regulations. Terms of repayment, including interest rates, vary by loan. Lenders perform a credit check and determine a loan applicant's creditworthiness before approving these loans.

### Veterans' Educational Benefits

Midwestern University is approved by the U.S. Department of Veterans' Affairs (VA) to certify enrollment for veteran education benefits for eligible programs. Students who receive education benefits for veterans are required to provide official military transcripts to the Office of the Registrar when requesting certification for those benefits. Midwestern University reviews all prior education and training for VA benefit recipients. Midwestern University does not participate in the Yellow Ribbon Program. Because Midwestern University is a private, not-for-profit institution, students

who are Illinois veterans are not eligible for Illinois Veteran Grant (IVG) funding.

In accordance with Title 38 US Code 3679(e) Midwestern University adopts the following additional provisions for a student who is entitled to educational assistance under chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 GI Bill® benefits while payment to the institution is pending from the VA. If such payments or disbursements under Chapter 31 or 33 are delayed, Midwestern University will not:

- Impose any penalty or late fee;
- Deny the student access to classes, libraries, or other institutional facilities, or
- Require the student secure alternative or additional funding up to the amounts covered by Chapter 31 or 33.

To qualify for this provision, students may be required to submit to the Office of the Registrar no later than the first day of class:

1. A Certificate of Eligibility (COE) for entitlement to educational assistance under chapter 31 or 33;
2. A "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for chapter 31 authorization purposes;
3. A written request to use such entitlement;
4. Provide additional information necessary to properly certify the enrollment for benefits.

For more go to the Office of the Registrar webpage for Military and Veteran students at <https://www.midwestern.edu/admissions/military-and-veteran-students.xml>. Students may contact the Office of the Registrar at [ilregistrar@midwestern.edu](mailto:ilregistrar@midwestern.edu).

Midwestern University  
Office of the Registrar  
Haspel Hambrick Hall, Suite 302  
555 31st Street  
Downers Grove, IL 60515

### Financial Aid for Repeat Courses

Students repeating a previously passed course may be eligible to receive Federal financial aid for the repeated course. Federal regulations define "passed" as any grade higher than an "F," regardless of program policy requiring a higher qualitative grade or measure to have been considered to have passed the course.

Students repeating a failed course(s) may be eligible for federal aid to cover the cost associated with the repeat of the failure(s) as long as Satisfactory Academic Progress standards

(SAP) are met. Those ineligible for Federal aid may qualify for private loans. Students should contact the Office of Student Financial Services to determine eligibility.

### Website Information for Financial Aid

Additional information regarding scholarship and loan programs, tuition payment plans, links to federal websites, and the Sensible Strategies financial literacy program can be accessed on the Midwestern University Student Financial Services webpage at:

<https://www.midwestern.edu/admissions/tuition-and-financial-aid.xml>

### Applying for Financial Aid

#### *Budget and Cost of Attendance*

Each class has an established Cost of Attendance (COA) or budget designed to cover a student's educational and living expenses; funding is only allowed within the parameters of the start/end dates of the academic year. The standard COA for each class, developed in accordance with federal guidelines, allows for a reasonable standard of living for a single student in the community. Each year the major components of the budget are reviewed and modified, if necessary, based on changes in costs. To help verify allowable expenses and amounts included in budgets remain reasonable, the Office of Student Financial Services will periodically survey students to gather information about 'actual' expenses they have incurred.

Representative expense categories in every budget include:

- Tuition and Fees
- Books and Supplies
- Room and Board
- Transportation Expenses
- Personal Expenses including insurances

Some programs may include technology, equipment, or other fees as well. In all instances, federal regulations govern what is allowable in the budgets.

While many students find it necessary to borrow to pay for their education, we highly encourage students to live as modestly as possible with a thrifty budget, to minimize debt, and that good choices now can lead to financial freedom down the road and lower repayment after graduation. The staff in the Office of Student Financial Services are always available to discuss any questions surrounding budgeting within our COA limits.

#### *Online Application Process*

The online financial aid application and instructions are updated annually and made available to all enrolled students. Newly accepted students who have paid their matriculation

deposit will have additional access to other relevant financial aid resources in Canvas on their student portal.

### Downers Grove Tuition and Fees

*Downers Grove Tuition and Fees (for academic year 2020-2021)*

Please Note: Tuition rates will be subject to change each academic year for all enrolled students. *Historically, tuition has increased between 3.75% and 7.00% annually. Programs with a trailing summer session will be subject to annual tuition increases for those summer sessions.*

Program	Tuition
Chicago College of Osteopathic Medicine	\$73,348
Chicago College of Pharmacy	\$46,863
Chicago College of Pharmacy (3-year program)	\$62,484
College of Dental Medicine-Illinois <sup>1</sup>	\$82,148
Chicago College of Optometry <sup>2</sup>	\$42,878
Physician Assistant Studies	\$51,638
Physical Therapy	\$43,868
Occupational Therapy	\$45,752
Clinical Psychology, Class of 2022 forward	\$33,768
Clinical Psychology	\$689/credit hr.
Biomedical Sciences, Master of Arts	\$44,824
Biomedical Sciences, Master of Biomedical Science	\$40,060
Master of Public Health	\$11,592
Speech Language Pathology <sup>3</sup>	\$44,058

For the 2020-2021 academic year, all programs (both full and part-time) have an annual student services fee of \$687. Additional fees may be assessed including disability insurance or other charges as determined by each college. Students enrolled less than full-time will be charged tuition on a per-credit-hour basis. All rates and fees are subject to change.

Additional fees assessed by Program:

<sup>1</sup>College of Dental Medicine-Illinois Program:

- Technology Fee - First Year Students Only - \$1,028
- Student Equipment Fee - First Year Students Only - \$1,075
- Supply Fee - All Years - \$5,289
- Instrument Rental Fee -All Years - \$2,440
- Simulation Laboratory and Clinic Fee - All Years - \$6,348



<sup>2</sup>Chicago College of Optometry Program:

- Equipment kits \*First year only - \$5,014

<sup>3</sup>College of Health Sciences Speech Language Pathology Program:

- Calipso clinical training \*First year only - \$210

### **Tuition Payment**

Tuition for full-time students is an annual rate payable over 1, 2, 3 or 4 quarters per year depending on the academic schedule of the student, except for Doctor of Clinical Psychology (Classes of 2021). Any student, enrolled where the course load meets the full-time definition, will pay the full-time tuition rate. Students exceeding the maximum prescribed course load will pay overload charges. Students extending their program will be charged the annual tuition rate for their additional year of enrollment. Students extending their program by one quarter or less will be charged according to their enrollment status. Students completing their clinical rotations pay a fixed tuition rate each quarter. Students are not charged on a per credit basis, but pay a fixed tuition rate each quarter during the completion of their rotations based on the annual tuition of the program.

Students are encouraged to pay all tuition and fees via Midwestern's secure website at <https://online.midwestern.edu>. If a student is receiving financial aid, the account should not be paid in full until the financial aid has posted. If the account is paid in full prior to financial aid posting, the payment will be returned to the credit card used. Options for payment include online check payment, debit card, or credit card. MWU accepts American Express, Discover, MasterCard, and Visa. For those paying by mail or in person, all checks and money orders should be made payable to Midwestern University, with the MWU student ID number indicated on the front. Cash payments are limited to \$250 or less. Tuition due dates will be publicized on [www.midwestern.edu](http://www.midwestern.edu). If tuition payments are made through the mail, please address the envelope as follows:

Midwestern University  
Office of Student Financial Services  
Haspel Hambrick Hall, Suite 102  
555 31st Street  
Downers Grove, IL 60515

Students who fail to pay balances owed as scheduled will have their account processed according to Midwestern University's Overdue Accounts Policy.

### **Payment Plans**

Payment plans that allow students to divide an unpaid balance into three equal payments over the course of a quarter. Policies regarding the payment plans:

1. All financial aid must be applied toward the unpaid balance due accepting student payment plan.
2. It will be mandatory for students to utilize MWU's electronic billing and payment system, available at <https://online.midwestern.edu>, to set up the payment plan each quarter.
3. A minimum balance of \$200 is required to participate in a payment plan
4. The plan is interest free.
5. A \$25 fee will be charged per quarter. This fee is to cover costs associated with payment plan enrollment, maintenance, billing and collections. The fee will be charged and is due with the first payment.
6. A 1.5% late fee will be applied to accounts at 10 days late, and the balance will be accelerated to be due in full.
7. Any unpaid balance must be paid in full by the end of each quarter.
8. To maintain eligibility, students must adhere to the payment plan due dates and not be, or have been late on any current or prior MWU payment plans.

### *Prepayment Plans*

Students have the option to prepay the entire amount of tuition for their program at the tuition rate for the academic year for which tuition is paid. Prepayment of the entire program's tuition must be paid in full by the first day of matriculation.

A student may also choose to prepay tuition a year at a time in advance, for the full academic year, at the benefit of the current tuition rate. For example, a student matriculating in the 2020-2021 academic year in September 2020, who wishes to prepay the annual tuition amount, must make this prepayment by the first day of matriculation in September 2020. Another example is, if this same student does not choose to prepay at matriculation, but later decides to prepay year-three at the current year-two rate, this prepayment for year-three must be made by the first day of year-two classes. Any exceptions to this policy must be approved by the Director of Finance.

All accepted International matriculates who are requesting an I-20 document in order to obtain an F-1 student visa OR who are not U.S. citizens/ permanent residents/ eligible non-citizens must prepay tuition, and in some cases other mandatory program fees for the first year of their educational program 45 days prior to the first day of the first quarter. Continuing international students must prepay tuition and, in some cases, other mandatory program fees for

each successive academic year on the University's stated due date.

#### *Credit Cards*

The Office of Student Financial Services accepts credit cards for payment of tuition, fees, insurances, on-campus housing, and other direct costs; however, the following requirements must apply:

1. All financial aid funds must first be applied to the balance before using a credit card for payment.
2. Credit card payments will not be accepted on accounts already paid in full, unless the student provides written authorization to hold the 'prepayment' for future quarters for which the student owes a balance after applying financial aid funds.
3. When using a third party's credit card, the Student Financial Services Office must receive authorization from the cardholder.
4. MasterCard, Visa, Discover and American Express are accepted.

#### **Important Information about Fees and Charges**

##### *Fee Charges*

All full and part-time degree seeking students enrolled in an academic year must pay the student services and applicable program specific fees. Students who are enrolled 3 or 4 quarters per year will be charged the full annual student services and program specific fees. Students who are enrolled in a program that ends with 1 quarter over the summer, or 2 quarters over the summer and fall will be charged 25% or 50% of the annual student services and program specific fees, respectively. The student services fee funds such areas as the recreation center, sports intra-murals, counseling services, operation of the student lounge, student government, student representation in government, and student events on and off-campus. The program specific fees fund the items described above in the Tuition and Fees section.

##### **Add/Drop Period**

Charges will be re-assessed accordingly for courses added/dropped within the add/drop period depending on the student's revised enrollment status (i.e. full-time, half-time, less than half-time, etc.). Please note that if all courses are dropped and a student is determined to be withdrawn for the entire quarter, tuition and fee charges may be assessed and will be based upon guidelines stated in the MWU Refund Policy: Return of Title IV and VII Funds.

##### **Partial Course Load**

Students registered for courses that total fewer than 12 credit hours per quarter are considered to have a partial course load. Prior authorization from the College Dean is required before students can begin a quarter with a part-time course load. In such circumstances, tuition is charged on a per credit hour basis. The rate for each quarter hour is calculated based on

the current quarterly full-time tuition divided by the standard credit hours of the program the student is enrolled in for the respective quarter enrolled. The per-credit hourly rate is multiplied by the enrolled credit hours to equal the tuition charge for the quarter.

##### **Course Overload**

Students registered for more courses than the prescribed schedule in a given quarter are considered registered for a course overload. Students must receive prior approval from the College Dean. Tuition is billed for the additional courses as follows:

- Course overloads are billed the annual tuition rate plus an additional per-credit rate.
- The per-credit rate is calculated by dividing annual tuition by the number of quarters to determine a quarterly rate. The quarterly rate is divided by the prescribed course load credit hours as specified for the program (below).
- Course overloads are defined as follows: CCOM > 31 credit hours; CDMI > 30 credit hours; CCP > 21 credit hours; CCO > 30 credit hours; CHS Graduate > 23 credit hours; CGS Graduate > 23 credit hours.

##### **Overdue Accounts**

The Student Accounts department within the Office of Student Financial Services will follow up with students to collect past due accounts. The overall goal is to encourage all students to pay their balance on time so that they are not faced with the consequences as outlined below.

Consequences of past due accounts can include any and all of the items listed below:

1. A 1.5% late fee will be assessed at 10 days past due for all balances of \$500 or more. Balances of \$499 or less are assessed a fixed \$7.50 late fee.
2. Past due notices will be sent via email.
3. Follow-up contacts will be made but are not limited to phone calls.
4. At 15 days past due, the College Dean will be notified of the delinquency.
5. At 30 days past due, student may be dropped from enrollment by the College.
6. If a student is suspended or terminated from MWU, he/she must reapply for admission to MWU.
7. Withholding of academic transcripts.
8. Continued non-payment of account puts the student at risk of being referred to a third party for collection. This may result in a collection fee assessed and the delinquent account may be reported to one or more of the national credit bureaus.

Note: A student may be exempt from payment deadlines and permitted to continue in school without risk of suspension. However, students must notify Student Accounts of any, and all circumstances that may necessitate an exception to the payment deadlines. Exceptions to this policy may be made for the following reasons:

1. Circumstances beyond the student's control (i.e. non-arrival of financial aid funds applied for well in advance of the due date);
2. A payment plan has been approved by the Office of Student Financial Services

### **Returned Checks**

A fee may be charged on any returned check. After two returned checks a student will be required to pay by cashier's check or money order. No exceptions will be made.

### **Receiving Funds**

#### **Living Expense Loan Refund**

Students who borrow funds for their living expenses will receive periodic refunds via direct deposits to cover such expenses including room and board, transportation expenses, books and supplies, and personal expenses including insurances. Students have the obligation to budget funds appropriately so they are able to cover their expenses month to month.

Through our comprehensive "Sensible Strategies" program, the Office of Student Financial Services provides a variety of resources to assist students with important money management skills; these include budgeting, credit cards, managing your credit, money management for couples, and our innovative financial literacy tools. Go to the Financial Services Sensible Strategies webpage for information on programs, events, and helpful resources.

#### **Direct Deposit**

Direct deposit for financial aid refunds is mandatory. Students requesting an exception to this requirement must submit an annual appeal to the Director of Student Financial Services & Registrar explaining the circumstances that make it impossible for funds to be electronically transmitted to the student's personal checking or savings account.

MWU will not be held responsible for any bank fees or charges that result due to insufficient funds in a student's bank account. MWU is also not responsible for late charges on any past due bills a student may incur. It is the student's responsibility to ensure the deposited funds have cleared their bank.

Direct deposit or refund checks made in error to the student must immediately be returned in full to MWU.

### **Satisfactory Academic Progress for Financial Aid Eligibility**

As required by Federal law, reasonable standards of satisfactory academic progress for maintaining financial aid eligibility have been established by MWU for all degree granting programs. These standards apply to all students.

#### *Purpose*

To establish, publish, and apply reasonable standards of satisfactory academic progress for financial aid eligibility as required by federal law for all aid types, including federal, state, or institutional assistance and veterans' educational benefits administered by MWU.

#### *Policy*

Federal regulations require that all students receiving Federal Title IV financial aid funds maintain Satisfactory Academic Progress (SAP), which states that both qualitative (GPA) and quantitative (pace/maximum timeframe) measures must be met and maintained for continuous financial aid eligibility as outlined in the MWU Standards of Satisfactory Academic Progress for Financial Aid Eligibility.

#### *Qualitative Measures*

- The GPA measurement is fixed. MWU does not use the graduated measurement.
- The Biomedical Sciences (M.A.) students are evaluated each quarter since the program is one year in length. All other programs are reviewed annually at the end of spring quarter.
- All students must maintain at least a "C" average each year in their respective programs in order to progress (MWU Standards of Satisfactory Academic Progress for Financial Aid Eligibility).
- Grades affect the cumulative GPA for summer courses taken at another institution used to advance to the next class level at MWU. Grades from students matriculating into a program from another school do not affect the GPA.
- If a Biomedical Sciences (M.A) student does not meet the minimum GPA standard at the end of a quarter, they will be placed on financial aid warning. If students don't meet the standards at the end of the next quarter, they will be placed on financial aid suspension with the right to appeal. All other students that don't meet the minimum GPA standard by the end of spring quarter will be placed on financial aid suspension with the right to appeal.
- All other students that don't meet the minimum GPA standard by the end of spring quarter will be placed on financial aid suspension with the right to appeal.

### *Quantitative Measures*

The quantitative measure defines the pace at which all students must progress to ensure program completion within the maximum timeframe permitted. This period of time cannot exceed 150% of the published length of each program. The completion ratio is calculated by dividing the cumulative "successfully completed" credit hours by the cumulative "attempted" credit hours. Transfer credit hours are included in the completion ratio for all programs. Students must earn a minimum of 67% of their cumulative credits attempted (not including audited courses) at the time of evaluation, and all periods of enrollment are included regardless whether or not the student receives financial aid. Less-than-full-time enrollment is prorated. Pace is evaluated quarterly for the Biomedical Masters of Arts students and annually for all other students.

Grades of "W" (withdrawals) made after the first week of classes will be included in the number of attempted credit hours and calculated against the quantitative (pace) measure. Grades of "I" (incomplete) will be included in the number of attempted credit hours as well, but will not be included in the qualitative (GPA) measure.

Students are governed by the performance standards of the department in which they are enrolled: Programs longer than a year must meet both quantitative/qualitative measures on an annual basis; programs one year or less must meet both measures at the end of each quarter.

### *Maximum Time Frame*

MWU is a graduate/professional school. Maximum time frame is defined by the length of the program. Length of programs is measured in years for clinical programs and credit hours for non-clinical programs. See chart titled MWU Standards of Satisfactory Academic Progress for Financial Aid Eligibility below for specific timeframes by program.

### *Quarterly SAP Reviews*

The quarterly SAP review process applies to students enrolled in the Biomedical Science (M.A.) program. When an unsatisfactory SAP determination has been made at the end of a quarter, a financial aid "warning" is issued. Students remain eligible for Title IV aid in the quarter immediately following a financial aid warning, and no further action is necessary unless a student wishes to file an appeal. If SAP is not achieved by the end of a financial aid warning period, a financial aid "suspension" status is issued for the following quarter. Students may be put on probation and made eligible for Title IV or Title VII funding during a probationary period once an appeal is approved by the Financial Aid Committee.

### *Quarterly SAP Review Appeals*

Any student placed on financial aid suspension will be notified of the loss of financial aid eligibility. Students must complete the SFS Appeal Form and work with their academic

department to come up with an approved academic plan. Both the SFS Appeal Form and approved Academic Plan must be submitted to the Office of Student Financial Services, who will forward it to the University Financial Aid Committee for consideration. The University Financial Aid Committee will only review completed appeals; all required documentation must be included.

Students are limited to a maximum of one (1) appeal of their financial aid status during the course of their enrollment in the Biomedical Science (M.A.) program at MWU. Students who do not attain satisfactory academic progress at the conclusion of their period of financial aid probation will be placed on financial aid suspension permanently and will not regain financial aid eligibility for the remainder of their enrollment in the Biomedical Science (M.A.) program at MWU.

### *Annual SAP Reviews*

Students cannot receive Title IV financial aid funds unless the suspension is successfully appealed and the student is placed on probation. A student on probation status may receive Title IV financial aid for a subsequent quarter. For students who need longer than one quarter (payment period) an Academic Plan is developed to help ensure that h/she can meet SAP standards by a specific point in time. While programs have discretion to determine the length of the Academic Plan, students must be monitored at the end of each quarter to confirm all components as specified in their Academic Plan are being met. Probation statuses may be suspended and student will lose eligibility for Title IV financial aid at the end of any quarter where Academic Plan requirements are not met. Once Title IV eligibility is lost, students must continue at their own expense until SAP requirements as set forth in this policy are achieved.

### *Annual SAP Review Appeals*

Students must complete the SFS Appeal Form and work with their academic department to come up with an approved academic plan. Both the SFS Appeal Form and approved Academic Plan must be submitted to the Office of Student Financial Services, who will forward it to the University Financial Aid Committee for consideration. The University Financial Aid Committee will only review completed appeals; all required documentation must be included.

Students are limited to a maximum of two (2) appeals of their financial aid status during the course of their enrollment in any single program at MWU that is not covered by the quarterly SAP appeals process above. Students who do not attain satisfactory academic progress at the conclusion of their second nonconsecutive period of financial aid probation will be placed on financial aid suspension permanently and will not regain financial aid eligibility for the remainder of their enrollment in that specific program at MWU.

### *Financial Aid Suspension*

A financial aid "suspension" is issued at the end of the spring quarter for students not meeting satisfactory academic progress. Any student placed on financial aid suspension will be notified of the loss of financial aid eligibility.

### *Financial Aid Warning*

A financial aid warning is for one quarter (payment period) only. Any Biomedical Sciences M.A. students that are not achieving SAP for the first time at the end of a quarter are automatically placed on financial aid warning. Students are informed that they are still eligible for federal aid, but they must achieve a 2.75 GPA and/or 67% pace by the end of the quarter. If they don't they will be placed on financial aid suspension with the right to appeal. Students are allowed one warning period.

### *Financial Aid Probation*

Not used too often. It is the policy that all students submit an academic plan with their SAP appeal application. Academic plans are developed by program directors, faculty advisors, or the Dean's office. The student meets with the academic advisor regarding the academic plan throughout the academic year and also take advantage of the tutoring services on campus.

### *Maximum Appeals*

Any student placed on financial aid suspension will be notified of the loss of financial aid eligibility. Students must complete the SFS Appeal Form and work with their academic department to come up with an approved academic plan. Both the SFS Appeal Form and approved Academic Plan must be submitted to the Office of Student Financial Services, who will forward it to the University Financial Aid Committee for consideration. The University Financial Aid Committee will only review completed appeals; all required documentation must be included.

Students are limited to a maximum of two (2) appeals of their financial aid status during the course of their enrollment at MWU (Biomedical students get only one). Students who do not attain satisfactory academic progress at the conclusion of their second nonconsecutive period of financial aid probation will be placed on financial aid suspension permanently and will not regain financial aid eligibility for the remainder of their enrollment period at MWU.

### *Regaining Eligibility*

A student who chooses not to appeal or have their appeal denied have the option of attending at their own expense. Students who attend at their own expense will be eligible to have their aid reinstated after successfully completing the quarter (i.e., meeting SAP standards). Students in this situation should contact the financial aid office for counseling.

*Treatment of non-punitive grades, repeated courses, audit courses, pass/fail courses, withdrawals and incompletes*  
Grades of "W" (withdrawals) made after the first week of class will be included in the number of attempted credit hours and calculated against the quantitative (pace) measure.

A student who has "W's" (withdrawals) for a quarter are place on a leave of absence and will return the following academic year to retake those classes. If the student goes on a leave of absence in the winter or spring quarters, often times the program will have the student retake many of the courses in the quarter(s) that he/she did not achieve a high grade.

Grades of "I" (incomplete) will be included in the number of attempted credit hours as well, but will not be included in the qualitative (GPA) measure.

Classes in which students are auditing cannot be included in the amount of credit or contact hours earned when determining eligibility for financial aid. In addition, the following grades will not be considered as credit or contact hours earned/attempted for purposes of awarding federal financial aid: "I" Incomplete, "IP" In-Progress, "F" Failure, or "W" Withdrawal or "WF" Withdrawal/Failing. Therefore, audited courses are not included in either the GPA or Pace.

Pass/Fail courses are included in both the attempted and completed hours, but not the GPA.

Repeated courses are included in the GPA and Pace (attempted and completed). A program usually only allows a student to repeat a course once.

Midwestern University does not have remedial courses.

Non-punitive grades are not addressed in MWU policy. Courses assigned an "I" grade must be completed within 10 calendar days from the end of the final examinations for the quarter or they will be automatically converted to a grade of "F". An "IP" grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days. Authorization of the Deans is required and the completion period should not typically exceed one quarter.

### MWU Standards of Satisfactory Academic Progress for Financial Aid Eligibility

<b>Clinical Programs</b>	<b>Published Length</b>	<b>150% Limit</b>
Osteopathic Medicine	4 years	6 years
Pharmacy	3 years	4.5 years
Physician Assistant	2.25 years	3.33 years
Occupational Therapy	2.25 years	3.33 years
Doctor of Dental Medicine	4 years	6 years
Optometry	4 years	6 years
Physical Therapy	3 years	4.5 years
Speech Language Pathology	2 years	3 years
<b>Non-Clinical Programs</b>	<b>Published Length</b>	<b>150% Limit</b>
Biomedical Sciences (M.B.S.)	88.5 credits	132.75 credits
Biomedical Sciences (M.A.)	45 credits	67.5 credits
Master of Public Health	56 credits	84 credits

### Academic Status Chart for Determining Financial Aid Eligibility and Enrollment Status

<b>Academic Status</b>	<b>Credit hours per quarter</b>
<b>Full-Time</b>	12 minimum
<b>Three-Quarter Time</b>	9-11 credit hours
<b>Half-Time</b>	6-8 credit hours
<b>Less than Half-Time</b>	1-5 credit hours

*Please Note:* Classes in which students are auditing cannot be included in the amount of credit or contact hours earned when determining eligibility for financial aid. In addition, the following grades will not be considered as credit or contact hours earned/attempted for purposes of awarding federal financial aid: "I" Incomplete, "IP" In-Progress, "F" Failure, or "W" Withdrawal or "WF" Withdrawal/Failing.

The above policy is subject to change during the academic year. If revised, an addendum will be distributed to all enrolled students.

### Financial Aid Eligibility Policy and Procedure—Leave of Absence/Withdrawals/Return of Title IV Funds Policy

1. Students requesting a leave of absence while enrolled at Midwestern University must adhere to the policies and procedures established by the College Dean. In addition, students receiving federal financial aid must understand and follow

Federal Title IV and Title VII leave of absence regulations as stated in this policy, which may affect the amount of financial assistance received. As stipulated by federal financial aid regulations, any student, including a student receiving Title IV or Title VII assistance, shall be granted a leave of absence under the following conditions:

- The student must request the leave of absence in writing to the Program Director, if applicable, with approval from the College Dean. The letter should clearly state the reason(s) for the requested leave of absence.
- MWU may not charge the student tuition or any educational expenses during a long-term leave of absence (90 days or more). However, in order to continue coverage for long-term disability insurance and/or health and dental insurance, a student on leave is obligated to pay an insurance premium. In addition, a student living on campus will be responsible for paying rent, utilities, and covered parking charges.
- Students on leave of absence are entitled to all the programs and benefits afforded by the student services fee; accordingly, the annual fee will not be refunded.
- A subsequent leave of absence may be granted for the same student due to an unforeseen circumstance such as military duty, jury duty or a circumstance covered

- under the Family and Medical Leave Act of 1993 (FMLA).
- Any additional leaves of absence requests may not exceed a total of 180 days in a 12-month period. This 12-month period begins with the first day of the initial leave of absence.
  - A student on an approved leave of absence will retain in-school status.
  - There must be a reasonable expectation that a student will return from a leave of absence to continue enrollment at MWU.
2. Students granted short term leave of absences (90 days or less) will maintain financial aid eligibility and all charges will remain on the student account.
  3. For purposes of administering federal financial aid, a student who is receiving Title IV or Title VII financial aid funds and is granted leave of absence that does not meet the above guidelines will be considered to have withdrawn from MWU (for financial aid purposes only). Any student whose College Dean grants a leave of absence of 90 days or more must adhere to the leave of absence policy and reinstatement procedures established by the dean.
    - A subsequent leave of absence, not to exceed 30 days, may be granted for the same student due to an unforeseen circumstance such as a military duty, jury duty, or a circumstance covered under the Family and Medical Leave Act of 1993 (FMLA).
    - A student on an approved leave of absence will retain in-school status.
  4. If the student who is receiving financial aid fails to return from the leave of absence, the student will be considered to have withdrawn from MWU (for financial aid purposes only) as of the first day in which the leave of absence was granted. The Office of Student Financial Services will have 45 days after the day of determination to calculate a refund and return funds to the lender (30 days if withdrawal happens between quarters). For students who do not begin attendance at MWU, SFS must return the amount of unearned Title IV Funds no later than 30 days after the institution becomes aware that the student will not or has not begun attendance. If a student who is not receiving financial aid is granted a leave of absence and fails to return at the end of the approved period, the disposition of such a case will be decided on an individual basis.
  5. Upon receipt of an LOA notification, the Office of Student Financial Services informs the student of loan obligations, possible revisions in aid, deferment options, and consequences of failure to return.
  6. A student on leave of absence may receive health, dental and disability insurance coverage for the entire period of the leave, but must prepay the entire amount of the premiums during the leave. In

addition a student may continue to live in on-campus housing for the duration of the leave, but must pay in advance each quarter.

7. All outstanding balances must be paid in full prior to a student's return from a leave of absence.

### **Notification of Withdrawal**

1. A student's withdrawal date is the student's last date of attendance at a documented academically related activity (exam, turning-in of assignment, etc.), or the midpoint of the period for a student who leaves without notifying the institution, or for students who officially withdraw, the date the student began the prescribed withdrawal process.
2. A student must provide written notification and documentation, if applicable, to the appropriate College Dean or Program Director, stating the reason for withdrawal from MWU. If approved, the College Dean will conditionally approve a withdrawal until all clearances are obtained.
3. The student must receive clearance for withdrawal from the MWU departments on the <http://online.midwestern.edu> leave system within seven calendar days from the date of College Dean's conditional approval. This time frame will allow offices such as Student Financial Services and the Registrar to process the withdrawal, prepare the required financial aid exit, and calculate the return of unearned federal Title IV aid and all other aid, as appropriate.
4. Upon submission of all completed documentation and adherence to all clearance procedures, the College Dean will provide an official letter of withdrawal to the student. If a student does not complete the online exit counseling requirement, the Registrar will withhold official academic transcripts.

### **Return of Title IV Policy**

In establishing a refund policy, MWU has instituted and adheres to all requirements included in the Federal Formula for Return of Title IV Funds as specified in Section 484B of the Higher Education Act of 1965 (as amended). This policy will apply to Title IV and VII funding.

Student Financial Services (SFS) office is required by Federal law to recalculate financial aid eligibility for students who withdraw, take a leave of absence, or are dismissed prior to completing 60% of the quarter. If a R2T4 calculation is required during a quarter, SFS must return the amount of unearned Title IV funds to Department of Education no later than 45 days after the student's withdrawal date.

### *Withdrawal date*

The calculation for Return of Title IV funds is based upon the official withdrawal date determined by the Registrar's Office. A student's official withdrawal date would be the date the student began the official withdrawal process or the date of the student's notification, whichever is earlier. If a student did not begin the official withdrawal process or provide notification of his or her intent to withdraw, the student's withdrawal date would be the date the school becomes aware that the student ceased attendance. The Office of Student Financial Services are also notified by the College Dean's office.

The number of days completed is divided by the total number of days in the enrollment period to identify the percentage of time the student has completed. The percentage of Title IV aid earned is equal to the percentage of the enrollment period completed. After 60% of the enrollment period is completed, there is no return of the Title IV funds for that period and the student is considered to have earned 100% of the Title IV funds received. If a student officially withdraws while on a schedule break of five consecutive days or more, the withdrawal date is the last date of scheduled class attendance prior to the start of the scheduled break.

### *Refund Policy*

The refund policy includes the following guidelines:

1. Title IV funds include the following programs available at MWU - Direct Unsubsidized loans, Direct Graduate PLUS loans, and the Federal Work-Study (FWS) program. However, FWS monies awarded or earned by the student will always be excluded from the refund calculation.
2. Title VII funds include Health Professions Student Loans (HPSL) and Primary Care Loans (PCL).
3. Withdrawal On or Before the First Day of Classes of the Quarter for Which the Student Is Charged.
  - 100% of tuition, University housing, and all other fees will be credited.
4. Withdrawal After the First Day of Classes up to 60% of the Quarter for Which the Student is Charged.
  - Tuition, student services fee, and university housing charges will be prorated on a daily basis proportional to the number of days completed divided by the number of days in the payment

period for which the student was enrolled.

- University meal plans are credited based on the amount used during the quarter.
  - Information technology fee - If a student withdraws before matriculation, or after the first day of classes through the 60% point of the first quarter only, the information technology fee will be adjusted accordingly provided that the equipment/software is returned in the same condition in which the student received it, as determined by the University Information Technology Service, and the student withdraws from the college.
  - Title VII recipients will have future disbursements cancelled if the student is not enrolled full-time in subsequent quarters.
5. Withdrawal after the 60% mark of the Quarter for which the student is charged:
    - No refund of tuition will be made.
    - University housing for the quarter will be credited according to the terms on the housing contract.
    - All credits on University meal plan costs will be based on the remaining balance in the quarter.
  6. If a Subsequent Quarter(s) Has Been Prepaid
    - Tuition and other fees will be adjusted accordingly.
  7. Student services fee, disability and health insurance fees paid to the University will not be refunded if a current student withdraws after the first day of class for the quarter.
  8. All applicable refunds will be distributed in the following order as prescribed by federal law:
    - Direct Unsubsidized Loan
    - Direct Graduate PLUS Loan
    - Other Title IV Aid Programs
    - Other Federal Sources of Aid including Title VII funding
    - Other state or private aid \*
    - Institutional Aid (departmental loans and scholarships)\*\*
    - The Student \*\*\*



\* MWU will refund scholarship monies in accordance with the sponsoring agency's policy.

\*\* All refunds of institutional aid will be prorated based on the remaining weeks of the current quarter. Subsequent quarters of awarded institutional funds will be cancelled; therefore, no refunds will be made.

\*\*\* MWU will only refund monies to a student who does not owe a repayment of non-institutional funds or who does not have unpaid current year charges owed to the institution.

9. Students who borrowed and received monies from the Federal Direct Loan Program (Unsubsidized Loans, Graduate PLUS Loans); Institutional (MWU) Loans, Health Professions Student Loans, Primary Care Loans and/or private loans will be legally responsible and obligated to repay in accordance with the terms and conditions outlined in the promissory note(s).
10. Upon request by the student, examples of refund worksheets and calculations will be available for distribution in the SFS office.
11. Students who feel that individual circumstances warrant exceptions from published policy may appeal the MWU Refund Policy. Student appeals need to be submitted to the Director of Student Financial Services.

#### *Post-Withdrawal Disbursements*

If the total amount of title IV loan assistance that the student earned is greater than the total amount of title IV loan

assistance that was disbursed to the student as of the date of the institution's determination that the student withdrew, the difference between these amounts must be treated as a post-withdrawal disbursement.

If a R2T4 calculation is required, SFS must provide written notification to the student prior to making any post-withdrawal disbursement within 30 days of the student's withdrawal date. MWU must receive permission from the student before we can release the post-withdrawal disbursement.

#### **Institutional Refund Formula (Cash and Private Loans)**

If a student withdraws during a quarter, MWU will determine the amount of tuition and fees that were unearned by the institution. It will be calculated by determining how many remaining calendar days there are in the payment period divided by the total calendar days in the payment period. (Scheduled breaks of five or more calendar days are excluded in the calendar day count.) The Institution will pay back to the student (or lender) the unearned amount. After 60% of the days in the payment period have passed, the institution will have earned the total amount paid for that payment period. This method will be applied regardless of whether or not the student received any form of financial aid.

#### **Tuition Assistance (TA) Refunds (Military & Veterans' Educational Benefits)**

All Tuition Assistance (TA) funds will be returned according to the university's institutional refund policy. Up to the start date, 100% of all TA funds will be returned to the appropriate military service when the service member fails to: begin attendance, start a course (regardless if the student starts other courses), or the course is cancelled. All TA Funds will be returned directly to the military service, not to the service member.

# ACADEMIC CALENDAR

## Summer Quarter 2020

Classes Begin (PS-I AGO/MPH)	June 1, 2020
Rotation Begins - APPE Block 2 (PS-IV)	June 1 - July 10, 2020
Clinical Rotation (OP-IV)	June 1 - August 21, 2020
Orientation (PA-I/PT-I)	June 3 - 5, 2020
Last Day to Add/Drop Classes (PS-I AGO)	June 5, 2020
Classes Begin (PA-I/PT-I//PT-II/PT-III/OT-II/OT-III/MBS-II/PSY-II/PSY-III/PSY-IV/ PSY-V/SLP-II/DMD-III/DMD-IV/OP-III)	June 8, 2020
Didactic Course (PA-II)	June 8 - 19, 2020
Clinical Rotation Begins - Block 1 (MS-II/MS-IV)	June 8 - July 5, 2020
Last Day to Add/Drop Classes (PA-I/PT-I/AGO/PT-III/OT-II/OT-III/MBS-II/PSY-II/ PSY-III/PSY-IV/PSY-V/SLP-II/DMD-III/DMD-IV/OP-III)	June 12, 2020
Didactic Course (PA-III)	June 15 - 19, 2020
Last Day to Add/Drop Classes (PT-II)	June 19, 2020
Elective Rotations (PA-III)	June 22 - August 14, 2020
Rotations (PA-II)	June 22 - December 4, 2020
<b>Independence Day Observed *No Classes*</b>	<b>July 3, 2020</b>
Clinical Rotation - Block 2 (MS-III/MS-IV)	July 6 - August 2, 2020
Rotation - APPE Block 3 (PS-IV)	July 13 - August 21, 2020
Clinical Rotation - Block 3 (MS-III/MS-IV)	August 3 - 30, 2020
Last Day of Classes (MPH)	August 9, 2020
Quarterly Exams (PS-I AGO)	August 10 - 14, 2020
Last Day of Classes (PA-I/PT-I/PT-III/OT-II/OT-III/MBS-II/PSY-II/PSY-III/PSY-IV/ PSY-V/SLP-II/OP-III)	August 14, 2020
Quarterly Exams (PA-I/PT-I/PT-II/PT-III/OT-II/OT-III/MBS-II/PSY-II/PSY-III/PSY-IV/ PSY-V/SLP-II/OP-III)	August 17 - 21, 2020
Didactic Course (PA-III)	August 17 - 21, 2020
Last Day of Classes (PT-II)	August 21, 2020
Degree Completion Date - PsyD (PSY-IV/PSY-V)/MMS (PA-III)	August 21, 2020
Last Day of Classes/Clinical Courses (DMD-III/DMD-IV)	August 21, 2020
Quarter Break (OT-III)	August 24 - 28, 2020
Quarter Break (PA-I/PT-I/PT-II/PT-III/OT-II/MBS-II/PSY-II/PSY-III/PSY-IV/PSY-V/ SLP-II/DMD-III/DMD-IV/OP-III)	August 24 - September 4, 2020
<b>Grades Due (PA-I/PT-I/PT-III/OT-II/OT-III/MBS-II/PSY-II/PSY-III/PSY-IV/PSY-V/ SLP-II/DMD-III/DMD-IV/OP-III)</b>	<b>August 25, 2020</b>
Last Day of Classes (PS-I AGO)	August 28, 2020

Quarter Break (PS-I AGO)	August 31 - September 4, 2020
<b>Grades Due (PS-I AGO)</b>	<b>September 1, 2020</b>
<b>Commencement IL CHS</b>	<b>September 3, 2020, 9:30 a.m.</b>
<b>Fall Quarter 2020</b>	
Orientation (MS-I)	August 4 - 6, 2020
Classes Begin (MS-I/MS-II)	August 10, 2020
Last Day to Add/Drop Classes (MS-I/MS-II)	August 17, 2020
Orientation (OP-I)	August 19 - 21, 2020
Orientation (PS-I AGO/PS-I SGO)	August 21, 2020
Classes Begin (PS-I/OP-I)	August 24, 2020
Rotation - APPE Block 4 (PS-IV)	August 24 - October 2, 2020
Last Day to Add/Drop Classes (PS-I AGO/PS-I SGO/OP-I)	August 28, 2020
Clinical Rotation (OP-IV)	August 31 - November 20, 2020
Fieldwork Level II B (OT-III)	August 31 - November 20, 2020
Clinical Rotation Begins - Block 4 (MS-III/MS-IV)	August 31 - September 27, 2020
Orientation (OT-I/MBS-I/MABS/PSY-I/SLP-I)	September 1 - 2, 2020
Orientation (DMD-I)	September 1 - 3, 2020
<b>Labor Day *No Classes*</b>	<b>September 7, 2020</b>
Classes Begin (PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/PT-II/PT-III/OT-I/OT-II/MBS-I/ MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/DMD-I/DMD-II/DMD- III/DMD-IV/OP-II/OP-III)	September 8, 2020
CCP Dean's Convocation (11:10 a.m.)	September 8, 2020
Last Day to Add/Drop Classes (PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/PT-II/PT-III/OT-I/ OT-II/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/DMD-I/ DMD-II/DMD-III/DMD-IV/OP-II/OP-III)	September 11, 2020
<b>White Coat Ceremony (CCOM/CCP 10 a.m.; CHS/CDMI/CCO 2:30 p.m.)</b>	<b>September 26, 2020</b>
Clinical Rotation - Block 5 (MS-III/MS-IV)	September 28 - October 25, 2020
Rotation - APPE Block 5 (PS-IV)	October 5 - November 13, 2020
Clinical Rotation - Block 6 (MS-III/MS-IV)	October 26 - November 22, 2020
Last Day of Classes (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA- I/PT-I/ PT-II/PT-III/OT-I/OT-II/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-	November 13, 2020

I/SLP-II/DMD-I/DMD-II/OP-I/OP-II/OP-III)	
Quarterly Exams (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ I/ PT-II/PT-III/OT-I/OT-II/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/ I/ SLP-II/DMD-I/DMD-II/OP-I/OP-II/OP-III)	November 16 - 20, 2020
Last Day of Classes/Clinical Courses (DMD-III/DMD-IV)	November 20, 2020
Quarter Break (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ PT-II/PT-III/OT-I/OT-II/OT-III/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY- IV/PSY-V/ SLP-I/SLP-II/DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	November 23 - 27, 2020
<b>Grades Due (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ PT-II/PT-III/OT-I/OT-II/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/ SLP-I/SLP-II/DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)</b>	<b>November 24, 2020</b>
<b>Thanksgiving Day Observed *No Classes*</b>	<b>November 26 - 27, 2020</b>
Winter Quarter 2020	
Rotations - APPE Block 6 (PS-IV)	November 16 - December 23, 2020
Classes Begin (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ PT-II/OT-I/OT-II/OT-III/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY- V/SLP-I/ SLP-II/DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	November 30, 2020
Clinical Rotation - Block 7 (MS-III/MS-IV)	November 23, 2020 - January 10, 2021
Practicum III (PT-III)	November 30, 2020 - February 5, 2021
Clinical Rotation (OP-IV)	November 30, 2020 - February 19, 2021
Last Day to Add/Drop Classes (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS- III/ PA-I/PA-II/PT-I/PT-II/OT-I/OT-II/OT-III/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/ PSY-IV/PSY-V/SLP-I/SLP-II/DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	December 4, 2020
Didactic Course (PA-II)	December 7 - 18, 2020
Winter Break (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PS-IV/PA-I/ PA-II/PT-I/PT-II/OT-I/OT-II/OT-III/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/ PSY-V/SLP-I/SLP-II/DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	December 21, 2020 - January 1, 2021
Winter Break (MS-III/MS-IV)	December 21, 2020 - January 10, 2021
Classes Resume (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ PT-II/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/ DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	January 4, 2021
Rotations APPE Block 7 (PS-IV)	January 4 - February 12, 2021

Fieldwork II-A (OT-II)	January 4 - March 26, 2021
DEER Internship (OT-III)	January 4 - April 23, 2021
Rotations (PA-II)	January 4 - June 18, 2021
Clinical Rotation - Block 8 (MS-III/MS-IV)	January 11 - February 7, 2021
<b>Martin Luther King, Jr. Day *No Classes*</b>	<b>January 18, 2021</b>
Quarter Break (PT-III)	February 8 - 12, 2021
Clinical Rotation - Block 9 (MS-III/MS-IV)	February 8 - March 7, 2021
Practicum IV (PT-III)	February 15 - April 23, 2021
Degree Completion Date (PS-IV)	February 19, 2021
Last Day of Classes (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/ PT-I/PT-II/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/ SLP-II/DMD-I/DMD-II/OP-I/OP-II/OP-III)	February 19, 2021
Quarterly Exams (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT- I/ PT-II/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/ DMD-I/DMD-II/OP-I/OP-II/OP-III)	February 22 - 26, 2021
Last Day of Classes/Clinical Courses (DMD-III/DMD-IV)	February 26, 2021
Quarter Break (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ PT-II/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/ DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	March 1 - 5, 2021
<b>Grades Due (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/ PT-II/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/ DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)</b>	<b>March 2, 2021</b>
<b>Commencement (CCP)</b>	<b>March 4, 2021, 9:30 a.m.</b>
 <b>Spring Quarter 2021</b>	
Clinical Rotations (OP-IV)	March 1 - May 21, 2021
Classes Begin (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PS-III didactic block/ PA-I/PT-I/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/ DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	March 8, 2021
Clinical Rotation - Block 10 (MS-III/MS-IV)	March 8 - April 4, 2021
Practicum II (PT-II)	March 8 - May 14, 2021
Last Day to Add/Drop Classes (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/ PS-III/PA-I/PT-I/OT-I/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/ SLP-II/DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)	March 12, 2021

Didactic Course (OT-II)	March 29 - May 14, 2021
Clinical Rotation - Block 11 (MS-III/MS-IV)	April 5 - May 2, 2021
Last Day of Classes (PS-III didactic block)	April 9, 2021
Quarterly Exams (PS-III didactic block)	April 12 - 13, 2021
Rotation APPE Block 1 (PS-III)	April 19 - May 28, 2021
Didactic Course (OT-III)	April 26 - May 14, 2021
Degree Completion Date - DPT (PT-III)	April 30, 2021
Clinical Rotation - Block 12 (MS-IV)	May 3 - 23, 2021
Clinical Rotation - Block 12 (MS-III)	May 3 - 30, 2021
Last Day of Classes (MS-I/MS-II/PS-I AGO/PS-II AGO/PS-II SGO/PA-I/PT-I/OT-I/OT-II/ MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/DMD-I/DMD- II/ OP-I/OP-II/OP-III)	May 14, 2021
Quarterly Exams (MS-I/MS-II/PS-I AGO/PS-I SGO/PS-II AGO/PS-II SGO/PA-I/PT-I/OT- II/ OT-III/MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/DMD-I/ DMD-II/OP-I/OP-II/OP-III)	May 17 - 21, 2021
Quarter Break (PT-II)	May 17 - June 4, 2021
Degree Completion Date MA (PSY-II), MBS (MBS-II), MA (MABS), MS (SLP-II), OTD (OT-III)	May 21, 2021
Last Day of Classes/Clinical Courses (DMD-III/DMD-IV)	May 21, 2021
Senior Week (OP-IV)	May 24 - 25, 2021
Quarter Break (PS-I AGO)	May 24 - 28, 2021
Quarter Break (OP-II)	May 24 - 28, 2021
Quarter Break (PA-I/OT-I/OT-II/MBS-I/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/ DMD-II/DMD-III)	May 24 - June 4, 2021
Quarter Break (DMD-I)	May 24 - September 3, 2021
Practicum I (PT-I)	May 24 - June 11, 2021
<b>Grades Due (MS-I/MS-II/PS-I AGO/PS-II AGO/PS-II SGO/PS-III/PA-I/PT-I/OT-II/ MBS-I/MBS-II/MABS/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/SLP-II/ DMD-I/DMD-II/DMD-III/DMD-IV/OP-I/OP-II/OP-III)</b>	<b>May 25, 2021</b>
<b>Commencement CDMI/CCO</b>	<b>May 26, 2021, 9:30 a.m.</b>
<b>Commencement CCOM</b>	<b>May 26, 2021, 1:30 p.m.</b>
<b>Commencement CHS/CGS</b>	<b>May 27, 2021, 9:30 a.m.</b>
<b>Memorial Day Observed *No Classes*</b>	<b>May 31, 2021</b>

Quarter Break (MS-III)

May 31 - June 13, 2021

Last Day of Classes (PS-I SGO)

June 4, 2021

**Grades Due (PS-I SGO)**

**June 8, 2021**

DHS=Doctor of Health Science/DMD=Dental Medicine/MABS=Master of Arts, Biomedical Sciences/MBS=Master of Science, Biomedical Science/MPH=Master of Public Health/MS=Medicine/OP=Optometry/OT=Occupational Therapy/PA= Physician Assistant/PS=Pharmacy/PS AGO=Pharmacy Accelerated Graduation Option/PS SGO=Pharmacy Standard Graduation Option/PSY=Clinical Psychology/PT=Physical Therapy/SLP=Speech Language Pathology

# CHICAGO COLLEGE OF OSTEOPATHIC MEDICINE

## MISSION

The Chicago College of Osteopathic Medicine (CCOM) educates osteopathic physicians to provide compassionate, quality care, promote the practice of osteopathic medicine and lifelong learning, research and service.

The mission will be achieved by meeting the following objectives:

1. Demonstrating compassionate care
  - Provide instruction in ethics and communication skills
2. Demonstrating quality educational outcomes
  - Provide instruction in core clinical competencies
3. Providing osteopathic medical care
  - Provide osteopathic medical care in the MWU Multispecialty Clinic
4. Educating students in principles of lifelong learning
  - Provide instruction in principles of lifelong learning
5. Promoting research and scholarly activity
  - Provide instruction in research and scholarly activity
  - Provide elective opportunities for students to participate in research and scholarly activities
6. Sponsoring service-learning experiences through required CCOM class and club service activities
  - Provide service learning experiences
7. Providing introduction to MWU GME through class presentations
  - Integrate MWU GME exposure into the osteopathic student experience
8. Providing instructional material and presentations in preparation for residency placement
  - Prepare students for residency placement
9. Providing faculty development programs

## ACCREDITATION

The Chicago College of Osteopathic Medicine (CCOM) is accredited by the American Osteopathic Association (AOA)/Commission on Osteopathic College Accreditation (COCA). COCA is recognized as the accrediting agency for colleges of osteopathic medicine by the United States Office

of Education and the Council of Postsecondary Accreditation (COPA). CCOM will undergo its next full accreditation visit in April 2023. To review accreditation, approval, or licensing documentation, please contact the Office of the Dean at 630/515-6159.

For further information, please contact the American Osteopathic Association (AOA)/Commission on Osteopathic College Accreditation (COCA), 142 E. Ontario St., Chicago, IL 60611, or 800/621-1773 or <http://www.osteopathic.org/accreditation/>

## DEGREE DESCRIPTION

Upon graduation from the Chicago College of Osteopathic Medicine, the Doctor of Osteopathic Medicine (D.O.) degree is granted. The usual length of the course of study is 4 academic years. The curriculum consists of 2 years of primarily didactic instruction followed by 2 years of primarily clinical rotations including the applicable didactic material. Upon graduation with the D.O. degree, the graduate is eligible for postdoctoral residency training in all fields of medicine. Completing a program of study at Midwestern University does not guarantee placement in a residency program, future employment, licensure, board certification or credentialing.

The Doctor of Osteopathic Medicine (D.O.) degree offered by Midwestern University / Chicago College of Osteopathic Medicine on the Downers Grove campus is designed to meet the educational requirements to become licensed to practice medicine in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Midwestern University Chicago College of Osteopathic Medicine has not made a determination that its Doctor of Osteopathic Medicine curriculum meets the territorial



educational requirements for licensure or certification in the following territories: Puerto Rico and the U.S. Virgin Islands. Students in this program receive a direct notification that Midwestern University has not made a determination if their program meets the requirements in the above listed territories.

## ADMISSIONS

CCOM considers those students for admission who possess the academic, professional, and personal qualities necessary to become exemplary osteopathic physicians. To select these students, the College uses a rolling admissions process within a competitive admissions framework.

### Admission Requirements

Students seeking admission to CCOM must submit the following documented evidence:

1. Completion of the admissions course requirements
  - Grades of C or better (grades of C- are not acceptable)
  - To be competitive, students should have minimum cumulative and science GPAs over 3.00 on a 4.00 scale
  - To receive a supplemental application, students must have minimum cumulative and science GPAs of 2.75 on a 4.00 scale
2. Completion of a bachelor's degree from a regionally accredited college or university prior to matriculation
3. Competitive test scores on the Medical College Admissions Test (MCAT)
  - Average MCAT score for students entering CCOM in 2019 was 508
  - Only MCAT exam scores earned from tests taken no more than 3 years prior to the planned enrollment year are acceptable
  - Candidates can register for MCAT tests through the MCAT Program Office at 202/828-0600 or visit <https://www.aamc.org/register-mcat-exam> for information
4. Two letters of recommendation
  - One letter from either a premedical advisory committee, prehealth advisor or basic science professor who taught the applicant
  - A second letter from either a U.S. licensed D.O. or M.D. Letters from osteopathic physicians are strongly recommended. Letters written by family members are not acceptable.

Students seeking admission to CCOM must:

1. Demonstrate understanding of and interest in osteopathic medicine
2. Demonstrate service orientation through community service or extracurricular activities
3. Show motivation for, and commitment to, healthcare as demonstrated by previous work, volunteer work, or other life experiences
4. Possess verbal, non-verbal and written communication skills necessary to interact with patients and colleagues
5. Pass the Midwestern University fingerprint-based background check
6. Commit to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy
7. Meet the Technical Standards of the College

### Admissions Course Requirements

Biology with lab	8 Semester/12 Quarter hours
General Chemistry with lab	8 Semester/12 Quarter hours
Organic Chemistry with lab	8 Semester/12 Quarter hours
Physics with lab	8 Semester/12 Quarter hours
English Composition	6 Semester/9 Quarter hours

*Anatomy, Physiology, and Biochemistry are recommended courses that may contribute to success in medical school.*

### Competitive Admissions

Within its competitive admissions framework, CCOM uses multiple criteria to select the most qualified candidates from an applicant pool that exceeds the number of seats available. For the class matriculating in Fall 2019, CCOM received more than 7,000 applications for its 200 seats.

### Rolling Admissions

CCOM uses a rolling admissions process in which applications are reviewed and interview decisions are made at regular intervals during the admissions cycle. Interviews are conducted and selection decisions for the College are made until the class is filled. Applicants are notified of their selection status within three to four weeks after their interview date. To be competitive within this process, candidates should apply early in the admissions cycle.

### Application Process and Deadlines

The official AACOMAS application deadline is January 1st; however, applicants are strongly encouraged to apply early in the cycle. Due to the large number of applications and the limited number of seats available, applications will be considered on a first-come, first-served basis only until all seats are filled. Typically, 50% of all admissions offers are made by the end of December.

1. **AACOMAS Application - January 1st Deadline**

To initiate the application process, all applicants must apply online via the centralized application service administered by AACOM at <https://aacomas.liaisoncas.com/>. The AACOMAS application is typically available in May or June. As part of this process, students must submit official MCAT scores (for tests taken no more than 3 years prior to the matriculation date) and official transcripts to AACOMAS only. The Office of Admissions will not accept MCAT scores or transcripts submitted directly to Midwestern University. The deadline for submission of the AACOMAS application is January 1st.

2. **CCOM Supplemental Application - March 1st Deadline**

Upon receipt of the AACOMAS application from the application service, the Office of Admissions will e-mail supplemental applications to all applicants who have earned minimum cumulative and science GPAs of 2.75. Applicants must complete and submit their supplemental application forms with all required materials, including a nonrefundable/nonwaivable \$50 processing fee, to the Office of Admissions. All supplemental application materials must be received in the Office of Admissions on or before the deadline of March 1st.

3. **Letters of Recommendation - March 1st Deadline**

Applicants must submit two letters of recommendation. One letter must be written by a prehealth advisory committee, prehealth advisor or basic science professor who taught the applicant. The second letter must be written by a physician, either a U.S. licensed D.O. or M.D. Letters from osteopathic physicians are strongly recommended. The required letters of recommendation must be received in the Office of Admissions on or before the deadline of March 1st. Letters must adhere to the following guidelines:

- A. The Office of Admissions will accept letters of recommendation received from AACOMAS or submitted directly to the Office of Admissions via Interfolio, VirtualEvals or U.S. postal service;
- B. The full legal name and AACOMAS ID number of the applicant must be on the front page of the recommendation. The applicant provides this information to the evaluators;
- C. Letters must be prepared on letterhead stationery, which includes the complete contact information for evaluators;
- D. The academic degrees of evaluators must be listed (e.g., Ph.D., D.O., M.D.);

E. Applicants who have previously applied to CCOM must submit new letters of recommendation;

F. Letters from family members will NOT be accepted.

4. **Completed Applications - March 1st Deadline**

All application materials, including the AACOMAS application, MCAT scores (as reported to AACOMAS), two required letters of recommendation, and all supplemental application materials with the application fee must be received in the Office of Admissions on or before March 1st. Only completed applications received by the Office of Admissions on or before the deadline date will be reviewed for potential enrollment.

5. **Application Reviews and Interview Decisions**

CCOM uses a rolling admissions process to review completed applications and to make interview decisions. Applications will not be reviewed until all required application materials have been received by the Office of Admissions, including the AACOMAS application, official MCAT scores (as reported to AACOMAS), supplemental application materials, processing fee, and both required letters of recommendation. Students must complete their files as soon as possible to remain competitive in this process and to ensure full consideration of their applications.

*Please Note:* Applicants are responsible for tracking the receipt of their application materials and verifying the status of their required application materials on the University website. Instructions for accessing application information on the University's website will be sent by the Office of Admissions. Applicants should keep the Office of Admissions informed of any changes to the mailing address and e-mail address. All requests for application withdrawals must be in writing. Applicants are expected to act professionally in their interactions with AACOMAS and with CCOM. Candidates are expected to follow AACOMAS applicant protocol at all times.

**Interview and Selection Process**

Applicants must meet all of the admissions requirements listed previously to be considered for on-campus interviews. Once the Office of Admissions receives all of the required application materials, applicant files are reviewed to determine whether applicants merit interview invitations based on established criteria of the Admissions Committee. Applicants who are invited to interview will be contacted by the Office of Admissions and receive instructions for scheduling their interviews via the University's web-based scheduling system. Additional applicants may be placed on an interview "Waiting List" pending possible interview openings toward the end of the interview cycle. The on-campus interview process typically begins in September and ends in April.

When applicants come to campus for interview appointments, they join several other interviewees to meet with members of a three-person interview panel, which is selected from a volunteer group of basic scientists, current students, administrators, and clinicians. Panel members assess applicants for their academic and personal preparedness for medical school. They rate applicants on a standardized evaluation form relative to each variable. At the conclusion of the interviews, the panel members forward their applicant evaluations to the Admissions Committee. The Committee may recommend to accept, to deny, or to place the applicant on either the hold or alternate list. This recommendation is then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies students of their status within three to four weeks of the interview.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses. [The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient/client]
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 lbs.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem-solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the

exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including osteopathic manipulative techniques. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Commitments Made Prior to Matriculation at CCOM**

Applicants who have made commitments prior to matriculation at CCOM must be aware there may be curricular priorities not compatible with their tentative schedules. Students who wish to fulfill prior commitments must request time off from each Course Director and Department Chair during the first week of the academic year. MWU does not guarantee time off for prior commitments will be approved. Enrollment deferments are not offered for pre-matriculation commitments, nor for enrollment in other degree or certificate programs.

### **Dual Admission Program and Articulation Agreements with other Institutions**

A dual admission program is currently in effect with the Illinois Institute of Technology. Details of this program is available through the Office of Admissions.

### **Reapplication Process**

After receiving either denial or end-of-cycle letters, applicants may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of an admissions counselor.

To initiate the reapplication process, applicants must submit their applications to AACOMAS. Applications are then processed according to standard application procedures.

### **Transfer Admission**

CCOM may elect to accept transfer students from other U.S. osteopathic medical schools as long as these students remain in good academic standing and provide acceptable reasons for seeking a transfer. The American Osteopathic Association/Commission on Osteopathic College Accreditation (AOA/COCA) standards require that the last two years of instruction must be completed within the college of osteopathic medicine granting the D.O. degree.

Currently enrolled students are not granted advanced standing for individual courses completed at another institution. Full credit is granted for course work completed by students transferring from another institution for the purpose of completing their course of study at CCOM.

Students requesting transfers must meet the College's general requirements for admission and follow transfer procedures:

1. All inquiries for transfer to CCOM must be submitted to the Office of Admissions.
2. The Office of Admissions will confirm the availability of rotation sites through the Office of the Dean.
3. Applications will be provided if the Dean designates that there are available transfer positions.
4. Students must return their completed applications to the Office of Admissions and must include:
  - Transcripts from the COM (must have no "F's" or repeated courses);
  - Class rank (must be in top 50%);
  - Dean's letter verifying "Good Academic Standing" and specifying that the student is eligible for readmission;
  - A letter of reference from the Dean of Students indicating no professionalism concerns.
5. The CCOM Dean may require passage of COMLEX-USA Level 1 prior to transfer.
6. Completed applications are forwarded to the Office of the Dean.

7. The Dean reviews applications and the Dean or the Dean's designee conducts interviews with applicants.
8. Recommendations are forwarded to the Dean of CCOM for final approval.
9. The Dean notifies the applicants of the final transfer decision through the Office of Admissions.

## **GRADUATION REQUIREMENTS**

The degree of Doctor of Osteopathic Medicine (D.O) is conferred upon candidates of good moral character who have successfully completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements.

Students must pass all didactic course work and rotation courses with a grade of "C" or better in order to graduate. Students must pass COMLEX-USA Level 1 and both components of the COMLEX-USA Level 2 examinations of the National Board of Osteopathic Medical Examiners. A minimum of 45 months must elapse between the date of matriculation and graduation.

Fast Facts Link:

<http://www.midwestern.edu/academics/degrees-and-programs/doctor-of-osteopathic-medicine-il.xml>

## **MAXIMUM LENGTH TO DEGREE COMPLETION**

Except in the case of a student earning an additional degree while pursuing their degree in osteopathic medicine (D.O.), all students must complete the program leading to their D.O. degree within six years following the date of initial matriculation, as specified by the American Osteopathic Association (AOA) Commission on Osteopathic College Accreditation (COCA).

Academic policies set forth within this catalog establish the timeline for coursework and licensure examination completion in order to meet all graduation requirements within the six-year timeframe. In the event that a student requires a leave of absence, the total length of time taken by the student to complete their degree is considered prior to the leave being granted, and the student is advised accordingly. As detailed in the *Leave of Absence* subsection of the *Grades Appeals Policy* section of the catalog, typically a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. The duration of all leaves is monitored by a representative of the Office of the Dean to prevent a student from exceeding the six-year timeframe.

## **LICENSURE REQUIREMENTS**

Licensure for the practice of medicine is granted on a state-by-state basis. Graduation from the Chicago College of

Osteopathic Medicine meets one of the basic requirements for licensure in all 50 states. Graduates are referred to the licensing board in each state in which they have interest in licensure to obtain the specific requirements.

Midwestern University's Chicago College of Osteopathic Medicine (CCOM) is accredited by the American Osteopathic Association (AOA)/Commission on Osteopathic College Accreditation (COCA). COCA is recognized as the accrediting agency for colleges of osteopathic medicine by the United States Department of Education and the Council of Postsecondary Accreditation (COPA). CCOM is currently accredited through 2023. Graduates are eligible to take the Comprehensive Osteopathic Medical Licensing Exam (COMLEX) series of examinations leading to licensure as a physician.

Midwestern University's Chicago College of Osteopathic Medicine (CCOM) program is designed to meet the educational requirements to become licensed to practice medicine in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Midwestern University Chicago College of Osteopathic Medicine has not made a determination that its Doctor of Osteopathic Medicine curriculum meets the territorial educational requirements for licensure or certification in the following territories: Puerto Rico and the U.S. Virgin Islands. Students in this program receive a direct notification that Midwestern University has not made a determination if their program meets the requirements in the above listed territories.

In addition, all Osteopathic Medicine graduates must complete a graduate medical education program (residency training program) to become licensed to practice.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## CURRICULUM

### Instructional Program

As scientists and practitioners of the healing arts, osteopathic physicians subscribe to a philosophy that regards the body as an integrated whole with structure and function working interdependently. As an extension of this philosophy,

osteopathic physicians treat their patients as unique persons with biological, psychological, and sociological needs, an approach that underscores the osteopathic commitment to patient-oriented versus disease-oriented healthcare. In recognition of this approach, CCOM proactively modifies its curriculum to meet the needs of the practice of osteopathic medicine in the 21st century. To that end, the curriculum is being progressively enhanced with increasing alignment and integration of basic science and clinical sciences material. CCOM courses maintain rigorous standards by introducing the course material with interactive presentation methods in the manner that osteopathic physicians approach the patient in the clinical setting.

### Total Curricular Credit Hours: 245.5 Minimum

**Please Note:** CCOM reserves the right to alter its curriculum as appropriate for the essential professional preparation of its students.

\* Electives in first and second years are optional. There are 24 weeks of mandatory electives in the third and fourth years.

First Year (Fall, Winter and Spring Quarters) 57

#### OMS I Curriculum Fall Quarter

ANATD	1511	Histology	3
ANATD	1551	Gross Anatomy & Embryology I	4.5
BIOCD	1501	Biochemistry I	5
CLIND	1502	Foundations of Osteopathic Clinical Practice	1
CLIND	1552	Patient Symptom Presentations I	3
CLIND	1562	Physical Exam Skills I	1
CORED	1599	Interprofessional Education I	1
OMEDD	1552	Osteopathic Manipulative Medicine Lecture I	1
OMEDD	1562	Osteopathic Manipulative Medicine Laboratory I	1

**Total** 20.5

#### OMS I Curriculum Winter Quarter

ANATD	1552	Gross Anatomy & Embryology II	5
BIOCD	1502	Biochemistry II	4.5
CLIND	1430	Research Design, Methods and Approaches	1

CLIND	1553	Patient Symptom Presentations II	1.5
CLIND	1563	Physical Exam Skills II	0.5
CORED	1500A	Interprofessional Healthcare Communication	1
OMEDD	1553	Osteopathic Manipulative Medicine Lecture II	1
OMEDD	1563	Osteopathic Manipulative Medicine Laboratory II	1
PHYSD	1501	Physiology I	4
<b>Total</b>			<b>19.5</b>

#### OMS I Curriculum Spring Quarter

ANATD	1521	Neuroscience	6
CLIND	1503	Behavioral Health Assessment	2
CLIND	1554	Patient Symptom Presentations III	2
CLIND	1564	Physical Exam Skills III	0.5
OMEDD	1554	Osteopathic Manipulative Medicine Lecture III	0.5
OMEDD	1564	Osteopathic Manipulative Medicine Laboratory III	0.5
PHYSD	1502	Physiology II	5.5
		Electives	*
<b>Total</b>			<b>17</b>

Second Year (Fall, Winter and Spring Quarters) 64.5

#### OMS II Curriculum Fall Quarter

CLIND	1652	Clinical Symptom Integration I	7
CLIND	1662	Simulated Patient Care I	2
MICRD	1652	Infectious Disease, Etiologic Agents and the Immune Response I	8
OMEDD	1652	Osteopathic Manipulative Medicine Lecture I	1
OMEDD	1662	Osteopathic Manipulative Medicine Laboratory I	1
PATHD	1601	Pathology I	5
PHARD	1670	Pharmacology I	5
		Electives	*
<b>Total</b>			<b>29</b>

#### OMS II Curriculum Winter Quarter

CLIND	1653	Clinical Symptom Integration II	5
CLIND	1663	Simulated Patient Care II	1
MICRD	1653	Infectious Disease, Etiologic Agents and the Immune Response II	5
OMEDD	1653	Osteopathic Manipulative Medicine Lecture II	1
OMEDD	1663	Osteopathic Manipulative Medicine Laboratory II	1
PATHD	1602	Pathology II	6
PHARD	1671	Pharmacology II	3
		Electives	*

**Total 22**

#### OMS II Curriculum Spring Quarter

CLIND	1654	Clinical Symptom Integration III	3.5
CLIND	1664	Simulated Patient Care III	1
CLIND	1603	Mental Illness and Treatments	1.5
OMEDD	1654	Osteopathic Manipulative Medicine Lecture III	0.5
OMEDD	1664	Osteopathic Manipulative Medicine Laboratory III	0.5
PATHD	1603	Pathology III	4.5
PHARD	1672	Pharmacology III	2
<b>Total</b>			<b>13.5</b>

#### Third Year (Summer - Spring Quarters) Clinical Block

Year Total 68-74\* 68

#### Third Year (12 months)

CLIND	1702	Clinical Skills Assessment/EPA I (Fall)	1
CLIND	1703	Clinical Skills Assessment/EPA II (Spring)	1
CLROD	1700	Elective Clerkship I	6*
CLIROD	1701	Selective Rotation	6
FMEDD	1702	Family Medicine Rotation	12
IMEDD	1702	Internal Medicine Rotation	12
OBGYD	1702	Obstetrics and Gynecology Rotation	9

PEDID	1702	Pediatrics Rotation	9
PSYCD	1702	Psychiatry Rotation	6
SURGD	1702	Surgery Rotation	12
<b>Total</b>			<b>68</b>

**Fourth Year (Summer - Spring Quarters) Clinical Block**

Year Total 56-68\*

**Fourth Year Rotations (Option 1)**

CLIND	1804	Clinical Skills Assessment/EPA III (Summer)	1
CLIND	1805	Clinical Skills Assessment/EPA IV (Winter)	1
CLROD	1700 and CLROD 1800	Elective Clinical Clerkships	30-42*
EMEDD	1805	Emergency Medicine Rotation	6
FMEDD	1802	Family Medicine Rotation	6
IMEDD	1802A	Internal Medicine Rotation	6
OMED D	1801	Osteopathic Manipulative Medicine Rotation	6
<b>Total</b>			<b>56-62*</b>

**Fourth Year Rotations (Option 2)**

CLIND	1804	Clinical Skills Assessment/EPA III (Summer)	1
CLIND	1805	Clinical Skills Assessment/EPA IV (Winter)	1
CLROD	1700 and CLROD 1800	Elective Clinical Clerkships	30-42*
EMEDD	1805	Emergency Medicine Rotation	6
IMEDD	1802A	Internal Medicine Rotation	6

OMED D	1801	Osteopathic Manipulative Medicine Rotation	6
SURGD	1802	Surgery Rotation	6
<b>Total</b>			<b>56-62*</b>

**Fourth Year Rotations (Option 3)**

CLIND	1804	Clinical Skills Assessment/EPA III (Summer)	1
CLIND	1805	Clinical Skills Assessment/EPA IV (Winter)	1
CLROD	1700 and CLROD 1800	Elective Clinical Clerkships	30-42*
EMEDD	1805	Emergency Medicine Rotation	6
FMEDD	1802	Family Medicine Rotation	6
OMED D	1801	Osteopathic Manipulative Medicine Rotation	6
SURGD	1802	Surgery Rotation	6
<b>Total</b>			<b>56-62*</b>

**Fourth Year Rotations (Option 4)**

CLIND	1804	Clinical Skills Assessment/EPA III (Summer)	1
CLIND	1805	Clinical Skills Assessment/EPA IV (Winter)	1
CLROD	1700 and CLROD 1800	Elective Clinical Clerkships	30-42*
EMEDD	1805	Emergency Medicine Rotation	6
IMEDD	1802A	Internal Medicine Rotation	6
IMEDD	1802B	Internal Medicine Rotation	6
OMED D	1801	Osteopathic Manipulative Medicine Rotation	6
<b>Total</b>			<b>56-62*</b>

## COURSE DESCRIPTIONS

Prerequisites for courses may be established by the department that administers the course. Prerequisites are recommended to the Curriculum Committee for approval and are listed within the course description in the catalog. On a case-by-case basis, prerequisites may be waived upon approval of the Department Chair. Unless otherwise stated in the course descriptions below, courses have no prerequisites.

### *ANATD 1511 Histology*

In Histology, students study the structure of the cell. They learn the distinguishing morphologic characteristics of the four types of tissue: epithelium, connective tissue, muscle, and nervous tissue. After acquiring this basic knowledge, students then learn how the four tissues combine to form organs. At the conclusion of the course, students are able to identify any organ based upon its microscopic morphology.  
3 credits

### *ANATD 1521 Neuroscience*

This is an integrated, interdisciplinary course in which the students learn to identify and describe the structural components and corresponding functions of the human nervous system. Emphasis is given to correlating underlying lesions involving these structures with neurologic deficits and dysfunctions likely to be encountered in clinical practice. Integrated lectures are given by faculty in the departments of Anatomy, Pathology, Pharmacology, Physiology, and Family Medicine.  
6 credits

### *ANATD 1551 Gross Anatomy & Embryology I*

This course presents the human body in a regional approach. Through lecture and dissection laboratories, students will learn to apply anatomical knowledge to clinical practice. Students will study the embryological basis of adult anatomy, as well as the developmental basis of important anatomical malformations. This course will cover anatomy of the back, upper limb, thorax and abdomen.  
4.5 credits

### *ANATD 1552 Gross Anatomy & Embryology II*

This course is a sequel to ANATD 1551; the course will continue to present the human body in a regional approach. Through lecture and dissection laboratories, students will continue to learn to apply anatomical knowledge to clinical practice. Students will continue to study the embryological basis of adult anatomy, as well as the developmental basis of important anatomical malformations. This course will cover anatomy of the pelvis, perineum, lower limb, head and neck.  
5 credits

### *BIOCD 1501 Biochemistry I*

This course features lectures on basic concepts in biochemistry, cell biology and metabolism, along with small group activities that highlight these biochemical concepts through clinical case studies. Clinical correlations are featured in lectures and interpretation of laboratory data is emphasized. Integration of carbohydrate, protein and lipid metabolism, and organ specific metabolism in health and disease are discussed.  
5 credits

### *BIOCD 1502 Biochemistry II*

This course features lectures on human nutrition, molecular biology and genetics in normal development and diseases, including the medical genetics of hereditary disorders and cancer. Clinical correlations are featured in lectures and interpretation of laboratory data using clinical case studies are emphasized in workshops that involve small groups.  
4.5 credits

### *CLIND 1430 Research Design, Methods and Approaches*

The focus of this course is to provide students with general research methodology training. Students will learn how to evaluate the medical literature, develop research questions, test hypothesis, and identify appropriate statistical analysis. Students will complete CITI training required for work and research in clinical setting. They will also learn federal and ethical regulations for protecting human research participants. This course is completed online and is self-paced.  
1 credit

### *CLIND 1502 Foundations of Osteopathic Clinical Practice*

Foundations of Osteopathic Clinical Practice is a course for first year students that focuses on their professional development. The topics selected are designed to prepare the student for clinical rotations and clinical practice. They include medical terminology, biomedical statistics, and basic research techniques. In addition, topics such as physician wellness and cultural awareness are discussed in order to promote physician self-knowledge and communication skills. An introduction to population health and the medical education system is also provided to familiarize students with the healthcare system.  
1 credit

### *CLIND 1503 Behavioral Health Assessment*

This course introduces psychopathology with descriptive, dynamic and behavioral analyses of typical Behavioral Health syndromes. Emphasis is etiology, assessment and indications for referral. The use of the Diagnostic and Statistical Manual of Mental Disorders as the major diagnostic reference is presented.  
2 credits



*CLIND 1552 Patient Symptom Presentations I*

This clinically-based course introduces first year osteopathic medical students to the basic skills and techniques associated with conducting a comprehensive history and physical examination. Case/symptom introductions set the stage for in-depth discussion that integrates the knowledge gained from the basic science and osteopathic medicine courses. Topics progress from the basic diagnostic process to the cardiovascular exam. Each week's presentation includes communication, interviewing techniques, data collection methods, basic laboratory and diagnostic interpretation to assist the student in the development of medical lexicon. The unique interactive format of this course fosters critical thinking, thereby encouraging students to "think like a doctor."

3 credits

*CLIND 1553 Patient Symptom Presentations II*

Building upon the foundation of CLIND 1552 and following the same format, this course includes topics such as head, eyes, ears, nose, throat (HEENT), upper and lower extremity musculoskeletal exam, and growth and development.

1.5 credits

*CLIND 1554 Patient Symptom Presentations III*

The final course in the Patient Symptom Presentations series continues to mirror the clinical experience. Complex topics include the wellness encounter for different patient populations and concludes with "Putting It All Together."

2 credits

*CLIND 1562 Physical Exam Skills I*

The Fall Quarter of PES introduces osteopathic medical students to taking a history (utilizing standardized patients), obtaining a review of systems, approaching a differential diagnosis and conducting a normal physical examination (including diagnostic imaging).

1 credit

*CLIND 1563 Physical Exam Skills II*

The Winter Quarter of PES builds upon the Fall Quarter with regards to the normal physical examination to include diagnostic imaging and history taking. Students are introduced to clinical medicine through the ECCP experience in Winter Quarter. Students also complete a history OSCE. At the completion of Winter Quarter, students will be prepared to perform a complete "head to toe" physical examination.

0.5 credits

*CLIND 1564 Physical Exam Skills III*

The Spring Quarter of PES takes osteopathic medical students through specialty examinations, such as the pediatric

and geriatric exams. Students also complete a physical exam OSCE, and a second ECCP experience.

0.5 credits

*CLIND 1603 Mental Illness and Treatments*

This course focuses on major psychiatric issues and mental health problems individuals often confront such as substance abuse, addiction, cognitive disorders, bereavement, mental retardation, developmental disorders and psychiatric factors associated with medical conditions. The course emphasizes pharmacological therapies as well as clinical issues associated with psychiatric practice.

1.5 credits

*CLIND 1652 Clinical Symptom Integration I*

The Fall course of CSI is taught in the second year and builds upon, and reinforces, content taught in the first-year classes with a focus on abnormal findings. Topics include toxicology, endocrinology, ENT, pulmonology, neurology and rheumatology. Within this class, students will be guided to a higher level of clinical thinking. Presentations from physicians representing a variety of clinical fields incorporate prior academic subject material and build upon it with a clinical focus. This class will incorporate real-world patient management techniques and skills critical for a smooth transition from student to clinician.

7 credits

*CLIND 1653 Clinical Symptom Integration II*

The Winter course of CSI is taught in the second year that builds upon, and reinforces, content taught in the first-year classes with a focus on abnormal findings. Included topics include gastroenterology, psychiatry, OB/Gyne, and cardiology. Within this class, students will be guided to a higher level of clinical thinking. Presentations from physicians representing a variety of clinical fields incorporate prior academic subject material and build upon it with a clinical focus. This class will incorporate real-world patient management techniques and skills critical for a smooth transition from student to clinician.

5 credits

*CLIND 1654 Clinical Symptom Integration III*

The Spring course of CSI is taught in the second year that builds upon, and reinforces, content taught in the first-year classes with a focus on abnormal findings. Included topics include urology, hematology, oncology, and population health. Within this class, students will be guided to a higher level of clinical thinking. Presentations from physicians representing a variety of clinical fields incorporate prior academic subject material and build upon it with a clinical focus. This class will incorporate real-world patient management techniques and skills critical for a smooth

transition from student to clinician.  
3.5 credits

*CLIND 1662 Simulated Patient Care I*

The Fall course of Simulated Patient Care reinforces basic science education and clinical skills learned in the first year and builds up clinical reasoning and interpretation. Students develop note writing, critical thinking and presentation skills. The ability to read radiographic images, interpret lab tests and perform procedures related to emergent care is practiced.  
2 credits

*CLIND 1663 Simulated Patient Care II*

The Winter course of Simulated Patient Care will reinforce and build upon first year content as well as content presented in CLIND 1652, with cardiac- and abdominal- focused clinical skills, including imaging, EKG, ultrasound, airway management and phlebotomy. Additionally, students will practice clinical reasoning in patients who are poor historians.  
1 credit

*CLIND 1664 Simulated Patient Care III*

The Spring course of Simulated Patient Care will reinforce and build upon first year content as well as content presented in CLIND 1662 and CLIND 1663, with a focus on developing patient case history skills to a group, basic surgical skills, and techniques for evaluating pediatric patients.  
1 credit

*CLIND 1702 Clinical Skills Assessment/EPA I (Fall)*

Clinical Skills Assessment/ is a course -offered in the fall of third year. It's designed to evaluate the clinical skills of history taking, physical examination, developing a diagnosis, and treatment plan formulation. Written documentation and oral presentation skills are also assessed. These are skills are some of the core Entrustable Professional Activities (EPAs) medical students and residents must master in order to provide safe patient care. These skills are assessed using eight Objective Structured Clinical Examinations (OSCEs). The OSCEs include encounters with standardized patients. The format for the OSCEs is similar to the format for the COMLEX USA Level 2-PE exam. Students must pass this course in order to receive permission to take the COMLEX USA Level 2-PE exam.  
1 credit

*CLIND 1703 Clinical Skills Assessment/EPA II (Spring)*

Clinical Skills Assessment/EPA II is offered in the spring of third year. Students are assessed for their mastery of basic procedural skills that are part of the core EPAs. The procedural skills that are assessed include Foley catheter insertion, bag-valve mask ventilation, and IV insertion. These procedures are performed in a simulation environment.  
1 credit

*CLIND 1804 Clinical Skills Assessment/EPA III (Summer)*

Clinical Skills Assessment/EPA III is an OMSIV summer course that reviews and assesses a variety of 13 Entrustable Professional Activities (EPA) expected of a graduating osteopathic medical student. The primary purpose of this course is to reinforce integrated care of the patient, assess student performance of selected EPAs, and identify gaps in education. Clinical Performance Assessment III will focus on interpretation of laboratory test results and diagnostic imaging. Review will take place through online modules, textbooks and assigned readings. In addition, all OMSIV students will participate in and complete Advanced Cardiac Life Support Training.  
1 credit

*CLIND 1805 Clinical Skills Assessment/EPA IV (Winter)*

Clinical Skills Assessment/EPA IV is an OMSIV winter course which is a review and assessment of a variety of 13 Entrustable Professional Activities (EPA) expected of a graduating osteopathic medical student. The primary purpose of this course is to continue to reinforce integrated care of the patient, assess student performance of selected EPAs, and identify gaps in education. Clinical Performance Assessment IV will focus on writing prescriptions and admission orders, participating in patient handoffs, and medical team collaboration. Testing will take place in the MWU Simulation Center.  
1 credit

*CLIROD 1701 Selective Rotation*

A four-week clinical selective is offered during the third year. Students are given the opportunity to select from a set of available rotations covering topics not typically offered in the Core OMS III curriculum. Such specialties may include: Transplant Medicine, Emergency Medicine, Radiology, Neurology, Clinical Research and others. Prerequisites may apply to these selections.  
6 credits

*CLROD 1700 and CLROD 1800 Elective Clinical Clerkships*

Students have 32 total weeks of electives available, 4 weeks in the third year (CLROD 1700) and 28 weeks in the fourth year (CLROD 1800). Elective rotations must be done in four week blocks, although students may petition the respective Clinical Department Chair to be allowed to split an elective into two 2-week blocks. Students may request to do one 4-week elective in basic science or clinical research. One 4-week elective, if approved, may be used for an international rotation and two 4-week elective opportunities may be used for vacation. A student must complete 6 electives (24 weeks) to meet graduation requirements.  
30-42\* credits

*CORED 1500A Interprofessional Healthcare Communication*

This course introduces students to the fundamental principles for effective communication with patients, families and significant others of the patient. Using material gleaned from the empirical and clinical domains of Behavioral Medicine, the course focuses on patient-centered approaches for promoting, improving, and maintaining dialogue with patients. Effective communication has been shown to be central to patient satisfaction, professional satisfaction, patient adherence to treatment plans, and positive outcomes for the patient.

1 credit

*CORED 1599 Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease.

1 credit

*EMEDD 1805 Emergency Medicine Rotation*

In the emergency departments of CCOM's affiliate hospitals, medical students, under the direction of a member of the department, assist in providing emergency care. Medical students make initial assessments, take histories and do physicals, and make case presentations to the attending physician on a patient's condition. They must also propose a diagnosis, develop an appropriate treatment plan, and determine the final disposition of the patient. An orientation lecture and weekly didactic lectures/simulation labs are part of the rotation.

6 credits

*FMEDD 1702 Family Medicine Rotation*

Medical students complete an 8-week rotation during their OMS III year. Carefully supervised, this experience provides students with the opportunity to practice non-hospital-based outpatient medicine as well as inpatient medicine. The goal of the program is to ensure the student physician is exposed to the more common disorders encountered in an ambulatory care setting. Students are required, under the supervision of a member of the department, to utilize and apply osteopathic concepts in taking a history and physical, perform appropriate procedures, develop a differential diagnosis, formulate a treatment regimen, and identify a health promotion program that includes techniques to bring about changes in the patient's lifestyle.

12 credits

*FMEDD 1802 Family Medicine Rotation*

This four-week experience enables medical students to continue the process of developing skills in an ambulatory care setting. Fourth year medical students will be exposed to a patient population with more complex pathologies. The requirement of heightened diagnostic skills, as well as increased ability to deal with more serious and complex medical issues result in further development of the student's skills in history taking and physical diagnosis as well as the development of more complex differential diagnoses and treatment plans. Students will rotate at core sites within the Chicago area, a community medicine experience, or a rural rotation. Community medicine selections include care of the homeless, family planning, adolescent medicine or ambulatory geriatric care. Rural preceptorships are intended to foster interest in practicing in a rural area where resources and specialty services may be less readily available than in an urban center. Students in rural preceptorships will rotate within a practice located in Southern Illinois, Northern Indiana or Wisconsin.

6 credits

*IMEDD 1702 Internal Medicine Rotation*

Third year medical students participate in daily teaching rounds and attend teaching lectures and conferences during the Internal Medicine rotation. Students conduct in-depth studies on assigned cases. Medical students are evaluated, in part, on their ability to collect and analyze data and solve problems. A symptom-based lecture series with simulation is covered in this rotation. Online teaching material is offered by way of clinical cases, instructional physical examination videos as well as lectures from the internal medicine course.

12 credits

*IMEDD 1802A & 1802B Internal Medicine Rotations*

Fourth year medical students participate in daily teaching rounds and attend teaching lectures and conferences during the Internal Medicine rotations. Students also conduct in-depth studies on assigned cases. Medical students are evaluated, in part, on their ability to collect and analyze data and solve problems. Online teaching material is offered by way of clinical cases, instructional physical examination videos, as well as lectures from the internal medicine course. IMEDD 1802A - 6 credits; IMEDD 1802B - 6 credits

*MICRD 1652 Infectious Disease, Etiologic Agents and the Immune Response I*

This course is the first of a two course sequence covering both the etiologic agents of infectious diseases and the host immune responses to those agents. This course begins by focusing on fundamental principles of immunology, antigenic characteristics of microorganisms, the cells and mediators involved in host defense mechanisms against pathogens and tumor antigens, lymphatic recirculation and

lymphatic flow. Next, the course delves into the basic classification, structure, metabolism and genetics of bacteria, viruses, protozoa, helminthes and fungi. From that point on, lectures and small group/laboratories use the organ systems approach to examine the etiologic agents of infectious disease, the immune system responses and possible immunopathology. Clinical correlations and case presentations are featured for each organ system.  
8 credits

*MICRD 1653 Infectious Disease, Etiologic Agents and the Immune Response II*

This course is the second of a two course sequence covering both the etiologic agents of infectious diseases and the host immune responses to those agents. The lectures and small group/laboratories continue from the fall quarter course to use the organ systems approach in examining the etiologic agents of infectious disease, the immune system responses, and possible immunopathology. Clinical correlations and case presentations are featured for each organ system.  
5 credits

*OBGYD 1702 Obstetrics and Gynecology Rotation*

This rotation consists of a six-week block in the third year and is designed to provide students with a wide variety of clinical experiences. The rotation is accomplished in a wide variety of settings to include: 1) inpatient obstetrics, during which students participate in the labor, delivery, and postpartum care of patients; 2) inpatient gynecology, during which students observe and participate in surgery and pre- and postoperative care as well as daily inpatient rounds on obstetric and gynecologic patients and; 3) outpatient clinics in obstetrics and gynecology, which provide an excellent setting in which students can observe and learn techniques and procedures pertinent to office practice. Ample one-on-one supervision by residents and attending physicians enhances each student's learning process. A formal lecture series covers all major topics in the specialty. Distance learning case studies and quizzes provide consistent training and testing of students through the six-week rotation regardless of site selected. A hands-on OMM skills lab is provided during the educational didactic sessions demonstrating the integration of OPP/OMM into women's healthcare. The rotation begins with a general orientation session with simulation and hands-on skills in surgical scrub, suturing and knot tying, and laparoscopic simulation along with gynecologic examinations, and labor and delivery management using the Noelle simulation model. A pre-test assesses the student's pre-rotation fundamental knowledge and is integral to the student's development and final exam assessment. This clerkship provides basic exposure and fundamental knowledge imperative to the primary care of the female patient.  
9 credits

*OMEDD 1552 Osteopathic Manipulative Medicine Lecture I*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include landmarks, palpation, motion, somatic dysfunction, viscerosomatic reflexes and osteopathic considerations of the thoracic spine, including the rib cage and the lumbar spine including the pelvis.  
1 credit

*OMEDD 1553 Osteopathic Manipulative Medicine Lecture II*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include neurologic exam of the lower extremity, osteopathic considerations of the lower extremity, cranial osteopathy and osteopathic considerations of the cervical spine including the sub occipital region.  
1 credit

*OMEDD 1554 Osteopathic Manipulative Medicine Lecture III*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include neurologic exam of the upper extremity, osteopathic considerations of the upper extremity and osteopathic considerations of the sacrum.  
0.5 credits

*OMEDD 1562 Osteopathic Manipulative Medicine Laboratory I*

This hands-on course will be a blended offering of online and in-person material delivery. The material taught during this course will include landmarks, palpation, motion, somatic dysfunction, viscerosomatic reflexes, and osteopathic considerations of the thoracic spine including the rib cage and the lumbar spine including the pelvis.  
1 credit

*OMEDD 1563 Osteopathic Manipulative Medicine Laboratory II*

This hands-on course will be a blended offering of online and in-person material delivery. The material taught during this course will include neurologic exam of the lower extremity, osteopathic considerations of the lower extremity, cranial osteopathy, and osteopathic considerations of the cervical spine including the sub occipital region.  
1 credit

*OMEDD 1564 Osteopathic Manipulative Medicine Laboratory III*

This hands-on course will be a blended offering of online and in-person material delivery. The material taught during this course will include neurologic exam of the upper extremity,

osteopathic considerations of the upper extremity, and osteopathic considerations of the sacrum.  
0.5 credits

*OMEDD 1652 Osteopathic Manipulative Medicine Lecture I*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include viscerosomatic, reflexes, Chapman's reflexes, cranial osteopathy, osteopathic considerations of the sacrum, osteopathic considerations of the dental patient, osteopathic considerations of the EENT patient, osteopathic considerations of the pulmonary patient, osteopathic considerations of the headache patient, osteopathic considerations of the endocrine patient, and osteopathic considerations of the rheumatology patient.  
1 credit

*OMEDD 1653 Osteopathic Manipulative Medicine Lecture II*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include osteopathic considerations of the cardiac patient, osteopathic considerations of the GI patient, osteopathic considerations of the obstetrical patient, and osteopathic considerations of the genitourinary patient.  
1 credit

*OMEDD 1654 Osteopathic Manipulative Medicine Lecture III*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include osteopathic considerations of the psychiatric patient, neurologic exam of the upper extremity, osteopathic considerations of the upper extremity, neurologic exam of the lower extremity, osteopathic considerations of the lower extremity, and osteopathic considerations of the hospitalized patient.  
0.5 credits

*OMEDD 1662 Osteopathic Manipulative Medicine Laboratory I*

This hands-on course will be a blended offering of online and in-person material delivery. The material taught during this course will include viscerosomatic, reflexes, Chapman's reflexes, cranial osteopathy, osteopathic considerations of the sacrum, osteopathic considerations of the dental patient, osteopathic considerations of the EENT patient, osteopathic considerations of the pulmonary patient, osteopathic considerations of the headache patient, osteopathic considerations of the endocrine patient, and osteopathic considerations of the rheumatology patient.  
1 credit

*OMEDD 1663 Osteopathic Manipulative Medicine Laboratory II*

This hands-on course will be a blended offering of online and in-person material delivery. The material taught during this course will include osteopathic considerations of the cardiac patient, osteopathic considerations of the GI patient, osteopathic considerations of the obstetrical patient, and osteopathic considerations of the genitourinary patient.  
1 credit

*OMEDD 1664 Osteopathic Manipulative Medicine Laboratory III*

This course will be a blended offering of online and in-person material delivery. The material taught during this course will include osteopathic considerations of the psychiatric patient, neurologic exam of the upper extremity, osteopathic considerations of the upper extremity, neurologic exam of the lower extremity, osteopathic considerations of the lower extremity, and osteopathic considerations of the hospitalized patient.  
0.5 credits

*OMEDD 1801 Osteopathic Manipulative Medicine Rotation*

This is a core rotation required of all fourth year students. Each student will spend four weeks in the office of an osteopathic physician who uses an extensive amount of OMT in his or her practice. The didactic component will consist of a one-day comprehensive review of osteopathic principles, diagnosis, and common manipulative techniques held on the first day of the rotation in the OMM skills lab on the Downers Grove Campus. At the conclusion of the rotation, a written examination and practical examination will be given. The student will gain practical experience in using osteopathic principles and practices in the clinical setting.  
6 credits

*PATHD 1601 Pathology I*

The first portion of this course focuses on the basic concepts and principles of pathology by analyzing the inherent mechanisms that underlie all disease processes. Students develop an understanding of the processes of cellular injury and adaptation, inflammation and repair, neoplasia, hematology, and laboratory testing. This portion of the course focuses on the pathophysiologic, molecular and genetic alterations that underlie all disease processes, and examines their associated cellular, tissue, and systemic manifestations. The osteopathic principles that emphasize the importance of homeostatic balance and sequelae of its disruption are stressed. The remaining portion of this course introduces students to the study of disease through an organ systems approach.  
5 credits

### *PATHD 1602 Pathology II*

This course is a continuum of the organ system approach to the study of human disease introduced in PATHD 1601. The causes and pathophysiologic mechanisms underlying diseases of specific organ systems are examined along with their cytological, histological, and somatic manifestations. The pathophysiologic derangements of these diseases and potential consequences for the patient are also examined. The relationships between organ system diseases and ultimate systemic manifestations/implications are analyzed. Osteopathic principles and theory are incorporated into these studies, along with clinical case-based exercises.  
6 credits

### *PATHD 1603 Pathology III*

This course is the last in the continuum of the organ system approach to the study of human disease presented in PATHD 1601 and PATHD 1602. The causes and pathophysiologic mechanisms underlying diseases of specific organ systems are examined along with their cytological, histological, and somatic manifestations. The pathophysiologic derangements of these diseases and potential consequences for the patient are also examined. The relationships between organ system diseases and ultimate systemic manifestations/implications are analyzed. Osteopathic principles and theory are incorporated into these studies, along with clinical case-based exercises.  
4.5 credits

### *PEDID 1702 Pediatrics Rotation*

This six-week rotation is intended to provide the medical student with a comprehensive exposure to a wide variety of pediatric problems under the guidance and facilitation of the pediatric faculty. The curriculum is based on the core objectives of the Council of Medical Student Education in Pediatrics. The rotation includes clinical experience with faculty, online interactive case-based learning, didactic sessions, and simulation experiences. Attendance at all clinical and educational opportunities is mandatory.  
9 credits

### *PHARD 1670 Pharmacology I*

The Fall Quarter Pharmacology course includes a total of 50 lectures presented from August-November each year. The primary topics covered include General Principles of Pharmacokinetics and Pharmacodynamics, Pharmacogenomics, Drugs Acting on the Autonomic Nervous System, Endocrine Pharmacology, Hematologic Agents, Immunopharmacology, Gastrointestinal Agents, Anticonvulsants and Pain Management.  
5 credits

### *PHARD 1671 Pharmacology II*

Pharmacology II represents a continuation of Pharmacology I and will consist of 30 lectures presented over the Winter quarter. Primary topics to be covered include Cardiovascular Agents (diuretics, antihypertensives, antianginals, antiarrhythmics and drugs for heart failure), Antidiabetic Agents, Drugs for Lipid Disorders and Antimicrobial Agents (antibiotics, antifungals, antivirals and antiprotozoal agents) and Psychotherapeutic Agents (sedatives, anxiolytics, antipsychotics, antidepressants, stimulants, marijuana, alcohol and drugs of abuse).  
3 credits

### *PHARD 1672 Pharmacology III*

In Pharmacology III, the focus will shift from general pharmacology to applied clinical therapeutics. In these 20 lectures, the students will receive specific instruction on the uses of common drugs to manage common disease states. Emphasis will be placed on the management of patients' pharmaceutical care and clinical problem solving. Specific conditions to be discussed include hypertension, diabetes, angina, arrhythmias, hyperlipidemias, pain management, common infections and common psychiatric conditions.  
2 credits

### *PHYSD 1501 Physiology I*

This course presents the biophysics, functional properties and regulation of excitable cells, skeletal muscle, autonomic nervous system and cardiovascular systems. A discussion of the electrical and mechanical activity of the heart, circulatory fluid dynamics, control of peripheral vascular tone, and neurohumoral control of blood pressure will be included in the cardiovascular section of the course. Small group case discussions facilitate the development of critical thinking and problem-solving skills as the students use basic physiologic concepts to understand the pathogenesis of signs and symptoms in clinical case studies.  
4 credits

### *PHYSD 1502 Physiology II*

This course is a sequel to PHYSD 1501 that builds on the physiological foundations developed during the preceding quarter. The initial section of the course presents the function, mechanism of action, regulation and integration of the respiratory, renal and gastrointestinal organ systems that maintain body homeostasis through fluid, electrolyte, acid-base and nutritional balance. The endocrine and reproductive physiology sections of the course present the function, mechanism of action and feedback regulation of hormonal systems. Small group discussions continue to refine critical thinking and problem-solving skills as the students identify the physiologic and pathophysiologic mechanisms underlying the signs and symptoms described in clinical case studies.  
5.5 credits

### *PSYCD 1702 Psychiatry Rotation*

Working on hospital wards and outpatient clinics, the student experiences direct patient contact under the supervision of attending psychiatrists. This experience integrates previous learning with clinical experiences. A series of didactics including lectures and demonstrations facilitate this process.

6 credits

### *SURGD 1702 and SURGD 1802 Surgery Rotations*

The core clerkships in surgery are intended to expose students to a broad scope of surgical disease, allow them to develop the critical skills necessary to manage surgical patients, and to broaden their technical expertise with procedural tasks. General surgery remains the cornerstone of the core clerkship. It is supplemented by surgical subspecialty experiences. Subspecialty choices include: orthopedics, ENT, ophthalmology, neurosurgery, anesthesiology, trauma surgery, burn surgery, plastics and reconstructive surgery, cardiovascular and vascular surgery, and urological surgery. All core clerkships are at CCOM affiliated hospitals and clinical sites. Clerkships are designed around both ambulatory and in-patient settings. Students are expected to scrub and participate in operative procedures as well as in pre-operative and post-operative management. Additionally, students should become proficient in history and physical taking, sterile technique, insertion of foley catheters, suturing, IV access, evaluation of wounds, application of dressings, bandages and splints, and removal of sutures and staples. Throughout the core eight weeks during the third year, students attend a weekly didactic lecture and procedure lab series intended to supplement the clinical experience. Students are also expected to participate in conferences offered by the hospital such as morbidity and mortality, tumor conference, and grand rounds.

SURGD 1702 - 12 credits; SURGD 1802 - 6 credits

## PRECLINICAL ELECTIVE COURSES

Preclinical Electives are short, in-depth courses in a variety of areas related to medicine which are designed to broaden understanding of important topics. These courses are open to CCOM students in the spring quarter of their first year and in the fall and winter quarters of their second year. Failures in elective courses carry the same weighting as failures in core curriculum courses such as anatomy, biochemistry, etc. Preclinical elective courses typically carry a value of 1 to 2 credits.

The specific list of electives offered will vary and may include:

ANATD 1680/1681 Anatomy Teaching Elective

BIOCD 1415 Clinical Nutrition

CLIND 1407 Career Development

CLIND 1480 Leadership for Physicians

CLIND 1499 Student Research Elective

PHYSD 1470/1471 Physiology Teaching Elective

## CLINICAL ROTATIONS

Core clinical rotations are required and include assessment by both preceptor evaluations and post-rotation exams. Core rotations include family medicine, internal medicine, surgery, pediatrics, psychiatry, osteopathic manipulative medicine, obstetrics/gynecology and emergency medicine. Additionally, students are required to participate in a selective rotation. This is an opportunity to participate in a specialty rotation that is not part of the core OMS III curriculum and may be difficult to obtain as an elective as a third year medical student. These rotations may not be done at out-of-system sites.

Students must also complete elective rotations in recognized fields of medicine. Examples of rotations include anesthesiology, cardiology, cardiovascular/thoracic surgery, dermatology, endocrinology/metabolism, family medicine, gastroenterology, hematology/oncology, infectious disease, nephrology, neurology, neurosurgery, nuclear medicine, obstetrics/gynecology, ophthalmology, orthopedic surgery, otorhinolaryngology, pathology, radiology, rheumatology/immunology, urology and research.

Students may pursue elective clinical rotations at preapproved institutions where an additional agreement to send CCOM students has been established. Elective rotations may also be taken in any of the required core rotation disciplines. Other elective choices are subject to review and approval by the Associate Dean of Clinical Education. Elective options are also subject to the limitations as noted in the Clinical Rotations Manual.

### **Breaks/Vacation**

Third and fourth year students have a holiday break at the end of each calendar year. Additionally, students are allowed eight weeks of vacation total. Students may not take more than four weeks of vacation per quarter. For more information, reference the Clinical Rotations Manual.

### **Remedial Course for COMLEX-USA Exam Retakes**

Directed Study is a mandatory Pass/Fail four-week course which affords a student time for focused study to prepare to retake the COMLEX-USA Level 1, Level 2 CE, or Level 2 PE exam following a failure. A student is enrolled in Directed Study upon the recommendation of a representative of the Office of the Dean and/or the Promotions Committee. At the initiation of the course, the student is required to meet with a representative of the Office of the Dean to review their study strategy. Additionally, a Faculty COMCoach is assigned to work with the student for the duration of the Directed Study period. The student is expected to communicate with their COMCoach on a weekly basis to establish a study plan and then to assess progress so

alterations to the approach can be made if necessary. Enrollment in Directed Study does not contribute to the minimum number of Elective Rotation weeks required for graduation, nor does it replace any other graduation requirement.

CLIND 1710 – Directed Study (for OMSIII; 6 credits)

CLIND 1810 – Directed Study (for OMSIV; 6 credits)

## DEPARTMENT DESCRIPTIONS

### **Department of Anatomy**

Through a comprehensive course of study in Gross Anatomy, Histology, and Neuroscience, the Department of Anatomy provides instruction in the morphology of the human body. The study of anatomy is particularly germane to osteopathic medicine because the relationship between structure and function is a fundamental tenet of the osteopathic philosophy. Direct observation of human structure is the essence of the anatomy courses. In Gross Anatomy, all students participate in the dissection of the cadaver under the guidance of the Anatomy faculty. Dissection is supplemented by the study of anatomical models, osteological specimens, diagnostic images, and transverse sections. In Histology, students apply the principles presented in lecture to the microscopic identification of normal human cells and tissues, while the Neuroscience course uses case studies, brain specimens and laboratory exercises to apply and reinforce basic concepts.

The Department offers several elective courses, including Teaching and Research Electives. The Teaching Elective gives students the opportunity to teach in the Gross Anatomy and Embryology course. The Research Elective gives students the opportunity to participate in ongoing research projects with the Anatomy faculty. Areas of faculty research interest include: the evolution, development, and comparative functional morphology of human and non-human primate crania and limbs; malocclusion, skull shape and genetics; Cretaceous geological changes and its influence on the evolution and distribution of faunas; neuronal injury mechanisms during stroke or seizures; plasticity of the peripheral nervous system during development and adulthood; inner ear development and regeneration, neuroplasticity and recovery of function following ischemic stroke; the inflammatory response and how it is affected by alcohol, and anatomical education.

### **Department of Behavioral Sciences**

It was Hippocrates, the father of medicine, who was quoted as saying, "One must know of the person who has the disease as much as one must know of the disease the person has." Dr. Andrew Taylor Still, in the Hippocratic tradition, emphasized and expanded the integration of structure and function. The Behavioral Sciences curriculum provides the coursework and clinical rotation that builds the foundation

for the practice of holistic medicine. An emphasis is placed upon the importance of treating each patient in the context of that individual's unique biopsychosocial matrix.

### **Department of Biochemistry and Molecular Genetics**

First-year medical students complete a required, two-quarter sequence in medical biochemistry, the educational goals of which are to understand the major biochemical concepts of cell, tissue, and organ function in health and disease. These goals are achieved through lectures, small group case studies, and readings in the biomedical literature. In addition to the required courses, the Biochemistry faculty offer an elective course in Clinical Nutrition. Faculty members also accept students into a research elective program.

### **Department of Clinical Integration**

Clinical Integration is a department structured to provide oversight for the clinical aspects of the years one and two curriculum. Courses are designed to acquaint the osteopathic medical student with the clinical knowledge required for the practice of medicine, enabling them to integrate the knowledge gained in the basic science courses in order to formulate diagnostic decisions. Faculty in this department are physicians, clinicians and education specialists.

### **Department of Emergency Medicine**

Medical emergencies can happen anywhere and at any time. It is imperative that an osteopathic physician be prepared to provide emergency care not only in an emergency department or a physician's office, but also in social settings where little or no emergency equipment or supplies are readily available.

The members of the Department of Emergency Medicine are all specialists in the field of emergency medicine. They are engaged in clinical practice of emergency medicine as well as in clinical research in the field. Medical students may assist in clinical research projects within the Department of Emergency Medicine.

### **Department of Family Medicine**

#### *Family Medicine*

Family medicine physicians personify osteopathic medicine. Departmental members endeavor to instill respect for holistic, osteopathic medicine, particularly in primary care. The basics of the art of medicine are included in the family medicine curricula. Medical students are expected to master the continuum of the biopsychosocial aspects of medicine, and then apply these concepts in clinical settings. These basic experiences provide the background necessary for the selection of a medical specialty.

Members of the Department of Family Medicine serve as role models and are actively engaged in teaching and clinical research. Departmental members help medical students understand the principles of osteopathic medicine. Further,



they foster the development of the skills necessary to apply the osteopathic concepts in all aspects of patient care.

#### *Section of Pediatrics*

Pediatric patients present opportunities, challenges, and rewards that are unique in medicine. The members of the section of Pediatrics are all specialists in the field. They are engaged in clinical practice of Pediatrics as well as in clinical research in the field. Medical students may assist in clinical research projects within the Section of Pediatrics.

#### **Department of Internal Medicine**

The core of an osteopathic physician's knowledge and treatment of disease entities is found in internal medicine. The basics learned here pervade primary care, surgery, and the subspecialties of medicine. At CCOM, medicine is taught on the floors of affiliate hospitals. Because much of the teaching in medicine is one-on-one or with small groups, the members of the department are able to provide individualized instruction for the medical students. This enables the faculty to ascertain whether or not the medical students can incorporate the material mastered in the basic science courses into their practice of clinical medicine. Medical students can gain significant ambulatory experience in general internal medicine and subspecialty clinics while rotating through their required and elective clerkships in internal medicine.

The members of the Department of Internal Medicine, all of whom are highly trained general internists or sub-specialists, are engaged in clinical as well as bench research. Medical students may assist in these projects by monitoring patient progress and helping to collect the data for these studies. Consistent with our osteopathic principles, students will learn about the whole patient approach to medical care. Students will also understand how to partner with the patient care team to assist with the promotion of health.

#### **Department of Microbiology and Immunology**

More than one-third of the cases seen by family practice physicians involve infectious disease or immunologically related disorders. Medical students complete a required two-quarter sequence in the Fundamental Principles of Microbiology, Immunology and Medical Microbiology. The goals of this sequence are to provide students with the fundamental information necessary for the diagnosis, rational management and control of infectious disease, as well as immunologic disorders. These goals are achieved through problem-based interactive clinical case studies, computer-based case modules and lectures. The material presented in lecture is reinforced in the mandatory laboratory sessions that help students develop the skills they will find necessary to perform the most commonly used microbiologic techniques. The laboratory also allows students to become familiar with the general operations of a clinical microbiology laboratory.

In addition to the required courses, the Microbiology faculty also accept students into a research elective program. Areas of ongoing research include microbial communication, viral infection and entry, viral impact on immune system function, immune mechanisms of protection and pathology in microbial infections, and autoimmunity.

#### **Department of Obstetrics and Gynecology**

Obstetrics and Gynecology remains an essential part of the practice of all primary care osteopathic physicians. The basics of good prenatal care, office gynecology and the indications and options for appropriate surgical care of the female patient challenge physicians on a daily basis. The Department of Obstetrics and Gynecology provides the student with a dynamic educational experience, combining traditional fundamentals with fresh, innovative thinking and technology. Our primary goal is to train students to solve clinical dilemmas by applying clear, concise thinking to a solid foundation of knowledge in women's health. The members of the Department of Obstetrics and Gynecology are all specialists in the field. They are engaged in clinical practice of OB/GYN as well as in clinical research in the field. Medical students may assist in clinical research projects within the Department of Obstetrics and Gynecology.

#### **Department of Osteopathic Manipulative Medicine**

The Department of Osteopathic Manipulative Medicine is designed to serve as a focal point of osteopathic uniqueness within the Downers Grove Campus, Midwestern University. In addition to the traditional role of teaching the osteopathic courses to students, the Department of Osteopathic Manipulative Medicine is a resource to provide leadership to facilitate the demonstration of this osteopathic approach. A continuum of osteopathic training is essential, and the Department works to facilitate this continuity in the training process. The Department recognizes the necessity for a base of scientific research to support osteopathic theory and practice, as well as the necessity of clinical studies to document the efficacy and cost effectiveness of osteopathic care.

#### **Department of Pathology**

The Department of Pathology introduces students to the study of human disease. The department faculty are all Anatomic and Clinical pathologists, some of whom are actively engaged in clinical practice.

Through a lecture and reading based format, the department teaches students to focus on the human body as a group of integrated systems, and provides them an understanding of the pathophysiologic mechanisms that underlie disease manifestations. Students are familiarized with the vast spectra of human diseases using an organ system approach. They are taught to understand the relationships between basic scientific principles and the practice of clinical medicine, while integrating these principles into the study of human

pathology. This approach provides students a complete overview of human illnesses as they affect organ systems and the patient as a whole. Through faculty guidance, students explore pathophysiologic, anatomic, histologic, cellular, and genetic alterations unique to these conditions. Skills are fostered that allow students to incorporate and interpret laboratory data in diagnosis and treatment. The department is strongly aligned with osteopathic principles and perspectives, which are incorporated into the curricula of its courses. Because the faculty are experienced anatomic and clinical pathologists, they are able to draw upon their vast experiences, sharing them as part of the curricula. The department recognizes the value of research, and some of the faculty are able to provide students with research opportunities. Additionally, faculty engaged in clinical practice may provide students opportunities for shadowing and practical experience.

### **Department of Pharmacology**

The instructional program in Pharmacology focuses on the actions of clinically-important drugs and toxicants in humans. The primary goal of the program is to provide the osteopathic medical student with a firm understanding of the general pharmacology of the major classes of drugs and toxicants, so that the student can begin his/her clinical training at the highest possible level of preparedness and pursue a career of life-long learning as an osteopathic physician. The pharmacology courses will be presented over the Fall, Winter and Spring quarters of the academic year. The various classes of drugs will be considered on an organ system and disease-group basis supplemented with the incorporation of symptoms and clinical cases. In addition, students will receive instruction on a variety of related topics including general principles of drug action, pharmacokinetics, therapeutics, toxicology and drugs of abuse. Throughout the course sequence, the faculty will consider the various drugs and topics from a holistic, osteopathic perspective.

### **Department of Physiology**

Physiology is the branch of the life sciences concerned with the function of living systems. Health is customarily defined in physiologic terms: disease is perceived as a deviation from the normal physiologic states of the body. Disease states and the associated signs and symptoms are understood through a refined appreciation of the diverse regulatory processes that maintain the normal, functional status of the human body.

The Physiology Department offers courses that present the physiological principles and regulatory processes that underlie the normal function of the human body. These core principles provide a foundation upon which to develop an understanding of the physiologic mechanisms engaged in response to homeostatic imbalance and of pathophysiologic alterations that occur in disease. In addition to conventional didactic instruction, osteopathic medical students participate

in small group clinical case discussions that are used to promote critical thinking, problem solving and application of physiologic concepts and principles to clinically relevant problems. Medical students interested in research are encouraged to participate in ongoing research projects as a part of CCOM's Kenneth A. Suarez Research Fellowship Program, research electives and through work-study opportunities. Current research interests of the faculty include a variety of areas associated with biophysics, cardiovascular and endocrine physiology and mechanisms underlying osteopathic manipulative medicine.

### **Department of Surgery**

All osteopathic physicians must be trained to understand surgical diseases as presented in a clinical setting. They must master pre- and postoperative assessment of patients so they can function in any medical setting as an important and integral part of the patient care team.

The members of the surgery department are committed to CCOM's precepts of teaching, healing and serving. The academic mission of the department is to provide each student with both didactic and clinical training in the surgical arts. The members of the department provide comprehensive surgical care for the patients throughout CCOM's affiliated clinical facilities. The members of the department serve as mentors for all medical students in addition to identifying and supporting those who have the ability and interest to become osteopathic surgeons.

## **STUDENT ACADEMIC POLICIES**

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the College. In the event these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section in the front of the catalog for additional policies that apply to all students at Midwestern University.

### **Academic Review & Progression**

The Promotions Committee is charged with maintaining standards of excellence in academic courses in the preclinical and clinical years. The committee is comprised of medical school faculty who review the academic performance of students and assess students for promotion to the next academic year.

### **Academic Surveillance, Warning & Probation**

*Good Academic Standing* is achieved by maintaining  $\geq$  "C" cumulative average in all courses/rotations at all times. A student on academic warning or academic probation is not considered to be in good academic standing. To return to good academic standing, a student must pass the failed courses/rotations and incur no further failures.

*Advanced Standing* for currently enrolled students is not granted for individual courses completed at another institution. Full credit is granted for course work completed by students transferring from another COCA accredited institution for the purpose of completing their course of study at CCOM.

*Academic Warning* is issued by the Office of the Dean or the Promotions Committee when a student has failed a course/rotation, or at any time during the academic year when a student is currently failing or has failed a course/rotation. Academic warning represents notice that continued substandard academic performance may compromise the student's ability to pass one or more courses. Academic warning is not noted on the transcript. A student who is currently failing or has failed a course/rotation is required to meet with the Course Director or course faculty to formulate a plan of action. A student who is currently failing more than one course or rotation is required to meet with a representative from the Office of the Dean to formulate a plan in order to achieve academic success. Students on academic warning are discouraged from holding organizational offices. Academic warning does not require the student to meet with the Promotions Committee.

*Academic Probation* is defined as failure of 2 or more courses/rotations or a failure of any level of COMLEX-USA. Academic probation is issued by the Promotions Committee when a student meets this criterion, which represents notice that continued substandard academic performance may result in dismissal. Academic probation is noted in a student's permanent academic file and may be included in their Medical Student Performance Evaluation (MSPE). A student on academic probation is required to meet with a representative from the Office of the Dean. When a student passes the failed courses and returns to good academic standing, this is also noted in the student's file. Academic probation is not noted on the transcript. Students on academic probation are ineligible to hold student organization offices, or to participate in international rotations. Students on academic probation are required to appear before the CCOM Promotions Committee.

### **Appeal Process**

Following notification of a decision by the Promotions Committee, a student may appeal the decision in writing within three business days to the Dean. The Dean may grant

an appeal only if a student is able to demonstrate one of the following:

1. Bias of one or more Promotions Committee members.
2. Material information not available to the student or Promotions Committee at the time of its initial decision.
3. Procedural error by the Promotions Committee.

During the appeal process, the student must continue to attend classes. Failure of the student to meet with the Student Promotions Committee does not constitute a reason for appeal.

### **Attending Off-Campus Meetings, Conferences or Events**

Students interested in attending osteopathic conferences, lobby days, specialty-focused meetings or any medically or educationally related presentation offered while classes/rotations are in session must submit a written request for an excused absence a minimum of 30 days prior to the event date.

Students must be in good academic standing. OMSI and OMSII students must receive written approval from a representative of the Office of the Dean to attend the event. OMSIII and OMSIV students should follow the procedure for obtaining an excused absence from rotations as described in the Clinical Rotations Manual. Students are advised to wait until approval has been granted prior to making travel arrangements. Any costs incurred by a student who is denied approval to attend an off-campus event are the sole responsibility of the student.

### **Clinical Rotations Attendance Policy**

Please reference the Clinical Rotations Manual for details.

The Clinical Rotations Manual can be found here:

<https://www.midwestern.edu/academics/degrees-and-programs/doctor-of-osteopathic-medicine-il.xml>

### **COMLEX-USA Exam Policy**

**Students must pass COMLEX-USA Level 1, Level 2-Cognitive Evaluation (CE) and Level 2-Physical Evaluation (PE) examinations in order to graduate.**  
*COMLEX-USA Pass Rate and Average Exam Scores*

Historical first-time pass rates and average exam scores by CCOM students and graduates for COMLEX-USA Levels 1, 2-CE, 2-PE, and 3 can be found on the CCOM Fast Facts webpage at <https://www.midwestern.edu/academics/degrees-and-programs/doctor-of-osteopathic-medicine-il.xml>

### *COMLEX-USA Eligibility*

The CCOM Dean must certify a student is in good academic and professional standing for a student to register for and take COMLEX-USA Levels 1, 2CE and 2PE.

Students must successfully complete all OMS II course requirements, and meet other requirements as established by the Office of the Dean prior to being authorized to take COMLEX-USA Level 1. For those students authorized to take the Level 1 exam, the initial attempt to pass the examination must occur within the timeframe established by the Office of the Dean. Students begin clinical rotations while awaiting results of their first examination attempt.

Students must pass the COMLEX-USA Level 1 examination and meet requirements as established by the Office of the Dean prior to taking Level 2 CE and Level 2 PE. For both the Level 2 CE and the Level 2 PE, the initial attempt at each examination must be taken within the timeframe established by the Office of the Dean.

The United States Medical Licensing Examination (USMLE) is not a substitute for any component of the COMLEX-USA examination and does not fulfill a graduation requirement.

*Per the National Board of Osteopathic Medical Examiners (NBOME) requirements, the CCOM Dean may not certify graduates to register for and take the COMLEX-USA Level 3 except under limited circumstances.*

### *COMLEX-USA Level 1*

Any student who fails the COMLEX-USA Level 1 examination on the first attempt will be permitted to complete the clinical rotation in which he/she is participating at the time of failure notification. The student will be required to complete a program of study as directed by the CCOM Dean's designee and may be placed on mandatory academic leave (not to exceed 4 months) as outlined in the Promotions Committee guidelines. The student will be placed on academic probation until the passing COMLEX-USA Level 1 score is received.

Any student who fails the COMLEX-USA Level 1 examination a second time will be allowed to complete the clinical rotation in which he/she is participating at the time of failure notification. The student must meet with the Promotions Committee to determine the most appropriate course of action for the third attempt. The student may be placed into a second directed study program and/or academic leave for a maximum of four months. Upon receipt of a passing score, the student may resume rotations on the next scheduled block.

All retakes of the COMLEX-USA Level 1 must be completed within one year of the initial failure date. At no time will the student be placed on mandatory or elective leave to prepare for COMLEX-USA Level 1 that will delay student progress to the extent that it would take more than six years from matriculation for him/her to complete the D.O. program. A student who fails the COMLEX-USA Level 1 a third time will be dismissed.

### *COMLEX Level 2 CE or Level 2 PE*

Any student who fails the COMLEX-USA Level 2 CE or Level 2 PE (with no prior failures of any COMLEX-USA component) will be required to complete a program of study as directed by the CCOM Dean or their designee and may be placed on mandatory academic leave (not to exceed 4 months) as outlined in the Promotions Committee guidelines. If on an academic leave of absence, the student may resume rotations on the next scheduled block after he/she has taken the examination for the second time and is awaiting the results.

Any student who fails COMLEX-USA Level 2 CE or Level 2 PE a second time (with no prior failures of any other COMLEX-USA component) will be referred to the Promotions Committee to determine a course of action, which may include a mandatory academic leave of absence not to exceed 4 months in length. The student will be placed on academic probation until the examination is passed. The student may not return to rotations on the next scheduled block until a passing score is received. At no time will the student be placed on mandatory or elective leave to prepare for COMLEX-USA Level 2 CE or PE that will delay student progress to the extent that it would take more than six years from matriculation for him/her to complete the D.O. program.

Any student who accumulates two COMLEX-USA failures in any combination of levels/examinations will be referred to the Promotions Committee to determine a course of action. The committee will review the student's academic record and use this information to decide whether the student may return to clinical rotations while awaiting the results of their retake or if they may not return to rotations until a passing score is achieved.

A student who accumulates three COMLEX-USA failures of the same level or in any combination of COMLEX-USA Levels 1, 2 CE or 2 PE examinations will be recommended for dismissed.

**Promotions Committee Guidelines for COMLEX-USA Failures\***

<b>Exam</b>	<b>Usual Action*</b>	<b>Academic Status</b>	<b>Repeat Exam Timing**</b>	<b>Action Following Retake*</b>
All Passed	Continue in program	Good standing	N/A	N/A
One COMLEX-USA failure (any of COMLEX-USA Level 1, COMLEX-USA Level 2-CE or COMLEX-USA Level 2-PE examinations)	Retake failed COMLEX-USA component after study and remediation plan is completed	Academic probation until passed	Retake period will be recommended by the Promotions Committee and determined by the Office of the Dean. The retake period shall not exceed four months	Pass: Continue in program Fail: See next row
Two COMLEX-USA failures (same component or any combination of COMLEX-USA Level 1, COMLEX-USA Level 2-CE or COMLEX-USA Level 2-PE examinations)	Retake failed COMLEX-USA component after study and remediation plan is completed	Academic probation until passed	Retake period will be recommended by the Promotions Committee and determined by the Office of the Dean. The retake period shall not exceed four months	Pass: Continue in program Fail: See three COMLEX-USA Failures
Three COMLEX-USA failures (same component or any combination of COMLEX-USA Level 1, COMLEX-USA Level 2-CE or COMLEX-USA Level 2-PE examinations)	Recommend dismissal			

\*Action may be modified by the Promotions Committee for reasons of additional considerations.

\*\*Exam repeat schedule is at the discretion of the Office of the Dean.

\*\*\* Academic Leave of Absence is noted on the student's transcript.

**Course Withdrawal**

Please refer to the Midwestern University section of the catalog under Academic Policies, Withdrawal.

**Criminal Background Checks**

CCOM conducts prematriculation criminal background checks by fingerprinting as required by Illinois state law. Affiliation agreements may require additional fingerprinting or background checks for approval of students to participate in clinical rotations.

**Disciplinary Warning/Probation**

Disciplinary warning/probation occurs for student acts of professional misconduct as defined in Appendices II and IV of the Student Handbook. Disciplinary probation is not noted on the transcript but is kept in the student's permanent

academic file. Disciplinary probation information may be shared with clinical sites affiliated with Midwestern University educational programs and documented in the Medical Student Performance Evaluation (MSPE).

**Dismissal**

Matriculation in medical school is a privilege, not a right. Therefore, a student may be dismissed for any of the following reasons:

- Failure to exhibit the personal and professional qualifications that are prerequisites for the practice of medicine such as acts of dishonesty, including but not limited to cheating on exams, falsifying patient records/logs and plagiarizing;

1. Violation of MWU and CCOM rules and regulations stipulated as grounds for dismissal;
2. Failure to achieve minimum academic standards in courses, rotations and with COMLEX-USA examinations;
3. Falsification of admissions records;
4. Failure to meet and maintain technical standards;
5. Irregular behavior during COMLEX-USA testing;
6. Conviction of a felony or other criminal offense
7. Failure to report a criminal arrest

Students who fail three or more courses/rotations (in any combination) are recommended for dismissal. Students who accumulate three failures in any combination of the COMLEX-USA Level 1, Level 2-CE or Level 2-PE examinations are recommended for dismissal. The Promotions Committee reserves the right to change its usual actions for reasons requiring additional consideration. All decisions of the Promotions Committee may be appealed to the CCOM Dean in accordance with the policies found elsewhere in this catalog.

#### **Readmission After Dismissal for Poor Academic Performance**

Students who withdrawal when facing dismissal are not eligible for readmission. Students who have been dismissed are not eligible for readmission.

#### **Extended Study Program (ESP)**

*Academic.* A student may be placed in the Extended Study Program for academic reasons after approval of the Promotions Committee. A student placed in ESP for academic reasons is automatically placed on academic probation and will not be returned to good academic standing until all failures are successfully remediated. Once placed in ESP, a student is required to retake failed courses during the regular academic year and is not eligible for summer courses either at CCOM or at any other medical school. If a student is placed in ESP, such action does not modify or limit the Promotions Committee's options to recommend dismissal. The Promotions Committee individually reviews ESP students who fail academic courses and applies the Promotions Committee Guidelines as described. Thus, a student may be dismissed for academic reasons while in ESP.

*Non-academic.* Students have the option of requesting to voluntarily enter the ESP program to allow them additional time to address significant personal issues. A program of study is created that permits students to complete the first two years of the curriculum in three years. Students must petition the Dean or designee to voluntarily become an ESP student for personal reasons no later than completion of 50% duration of a quarter. Requests received after this date are

reviewed by the Dean or designee and granted only for reasons of substantiated hardship or medical emergency. Students who voluntarily enter ESP for non-academic reasons will not be placed on Academic Probation as long as they remain in good academic standing in all courses. Students who voluntarily enter ESP for non-academic reasons will be assessed tuition while enrolled for any additional years of instruction.

#### **Grade Point Average**

The grade point average is a weighted average computed using the number of credits assigned to each course and the quality points corresponding to the letter grade earned in each course. It is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course are determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated at the completion of each academic year and it does not include any grades or credits for courses audited or courses with a grade of withdrawal "W" or withdrawal failing "WF" or pass "P" or failed "F" that were repeated.

#### **Grade for Retaken Course**

Remediation of failed courses may entail participation in live or online coursework provided by outside institutions. Such courses may contain some material that was presented in CCOM courses which the student has successfully completed. The student will be responsible for any additional tuition and fees required to complete remediation coursework at outside institutions.

If a student receives a failing grade for coursework taken at Midwestern University, that grade is recorded on the transcript as a letter grade ("F" entry.) Upon repetition of a failed course, the original grade of "F" remains on the transcript and the repeated course and new grade are entered on the transcript. The grade for a failed course repeated and passed at Midwestern University or outside institution is recorded on the transcript as a grade of "C." For all failed clinical rotations at Midwestern University repeated and passed, a grade of "C" will be recorded on the transcript. For both preclinical coursework and clinical rotations that are repeated, the original failing grade will remain on the transcript but will not be included in the GPA calculations. The grade of "C" will be included in the GPA calculation. If a repeated preclinical course or clinical rotation is failed, a grade of "F" is again recorded on the transcript and included in the GPA calculation. Students who fail a course a second time will be recommended for dismissal.

## Grading System

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93–100	4.000	—
A–	90–92	3.670	—
B+	87–89	3.330	—
B	83–86	3.000	—
B–	80–82	2.670	—
C+	77–79	2.330	—
C	70–76	2.000	—
F	< 70	0.000	—
I	—	0.000	An Incomplete (I) grade may be assigned by a course director when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete (I) grades will be resolved within 10 calendar days from the end of final exams for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar. If an incomplete grade remains beyond the 10 days, it may be converted to a grade of "F," which signifies failure of the course.
IP	—	0.000	An In-Progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter with notification of the Registrar.
P	—	0.000	A pass designation (P) indicates the student made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but is not counted in any GPA calculations.
W	—	0.000	Withdrawal/Passing is given when the student's grade at the time of withdrawal is >70% or >C. Withdrawal/Passing is not counted in the GPA calculation, and is not counted in credit hour accrual for graduation. Refer to the MWU Academic Policies for details.
WF	—	0.000	Withdrawal/Failing is given when the student's grade at the time of withdrawal is < 70% or < C. Withdrawal/Failing is not counted in the GPA calculation and is not counted in credit hour accrual for graduation. Withdrawal/Failing may be considered as a failure by the Promotions Committee. Refer to the MWU Academic Policies for details.
AU	—	0.000	This designation indicates an audited course, that is, a student registered for a course with the understanding that neither academic credit nor a grade is earned. The course status may not be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
PG			This designation indicates the grade is pending (Pending Grade) in a course or rotation.

*These grading scales apply to all courses unless otherwise noted in the course syllabus.*

### **Immunization and Screening Policy**

CCOM students are required to follow the immunization policy as outlined in the Student Handbook. Immunization requirements for CCOM students are subject to current Center for Disease Control (CDC)/applicable state health department protocol and affiliated hospital/site rotation requirements. Students who do not follow the immunization policy by the stated deadline may jeopardize their acceptance or continued enrollment in the College. If, at any time, testing, attestation of disease-free state or immunizations expire, students may be placed on academic leave of absence until such time they are in full compliance with this requirement.

### **Insurance Policy**

CCOM students are required to follow the insurance policy coverage as outlined in the Student Handbook. Insurance requirements for CCOM students are subject to state health department protocol and affiliated hospital rotation requirements. Students who do not follow the insurance policy by the stated deadline may jeopardize their acceptance or continued enrollment in the College. Proof of health insurance will be required annually.

Students who are carrying Medicaid should acquire additional temporary health insurance coverage if they participate in clinical rotations in a state different from which they reside.

### **Liaison Structure**

#### *Student Representatives*

Each class elects student representatives following the guidelines stated in the current Student Handbook. The student representatives serve to bring to discussion any issues pertaining to academic schedules, University policy and

academic and nonacademic issues that relate to the teaching environment in all four years of the curriculum. The student representatives can meet directly with a representative from the Office of the Dean, the Chairpersons, the Course Directors or the faculty of the departments formally involved in the preclinical and/or clinical curriculum to address the issues noted above.

### **Promotions Committee**

The Promotions Committee reviews the academic performance of students in the preclinical and clinical years. The committee meets as needed to review academic and professional progress of students and considers student cases of academic failure, or identified academic deficiencies, as well as circumstances in which students have not met the professional standards set forth in the Osteopathic Oath. Students who attain satisfactory academic and professional progress are promoted to the next academic year provided all tuition and fees have been paid. Students with one failure have the option of meeting with the Promotions Committee but are not required to do so. Students with two or more failures are required to meet with the Promotions Committee. Failure to appear, when required, may result in disciplinary action. Decisions of the committee are confidentially sent to the affected students. The right of appeal exists and is described elsewhere in this catalog. Appeals must be filed in writing with the Dean within three business days following official notification of the committee's decision. The Promotions Committee also recommends to the Faculty Senate for graduation those students who have successfully completed curricular requirements, who have passed COMLEX-USA Level 1 and Level 2 CE and PE of the National Board of Osteopathic Medical Examiners, and who have paid all tuition and fees.



### Promotions Committee Guidelines\*

Course or Clinical Rotation	Usual Action*	Academic Status	Timing of Repeat Course/Rotation**	Action Following Remediation
All passed	Promote or Graduate	Good Standing	N/A	N/A
One course or one rotation failure	Retake course/rotation, or Extended Study Program (ESP)	Academic Warning	Summer, ESP, or on the Promotions Committee's recommended schedule	Pass: Promote Fail: Dismiss
Any combination of course or rotation failures resulting in two failures	Retake course/rotation, or ESP	Academic Probation	Summer, ESP, or on the Promotions Committee's recommended schedule	Pass both: Promote Fail either: Dismiss
Any combination of course or rotation failures resulting in three failures	Recommend dismissal			

\* Action may be modified by the Promotions Committee for reasons of additional considerations.

\*\* Course repeat schedule is at the discretion of the Promotions Committee.

Failures in elective courses carry the same weight as failures in core curriculum courses.

#### Promotion Policy

Students must meet all requirements for their class year in order to be promoted to the next class year.

#### Student Advising

##### *COMCoaching Program*

The COMCoaching Program pairs interested students with a faculty member or third/fourth year CCOM student to facilitate individual discussion pertinent to the requesting student's needs. Topics typically focus on acclimating to the medical school environment, achieving academic success, maintaining a school/life balance and preparation for boards. Interested students may contact the Office of the Dean to request a faculty or student COMCoach. Students who are struggling academically may be required to work with a faculty COMCoach.

##### *Faculty Advisor/Mentor*

Students are encouraged to use the advice, expertise and help of the faculty. Students should feel free to contact a faculty member of their choice for advice, encouragement and support. Students may also contact the Office of the Dean to have a faculty mentor assigned through the COMCoaching program.

#### Supervision of Medical Students by Licensed Healthcare Providers

IL MEDICAL PRACTICE ACT (225 ILCS 60/13) (from Ch. 111, par. 4400 13) Sec. 13. Medical students.

Candidates for the degree of doctor of medicine, doctor of osteopathy, or doctor of osteopathic medicine enrolled in a medical or osteopathic college, accredited by the Liaison Committee on Medical Education or the Bureau of Professional Education of the American Osteopathic Association, may practice under the direct, on premises supervision of a physician who is licensed to practice medicine in all its branches in Illinois and who is a member of the faculty of an accredited medical or osteopathic college. (Source: P.A. 89 702, eff. 7 1 97.) [www.ilga.gov](http://www.ilga.gov)

As part of their medical education experience, medical students must have direct, on-premises supervision by licensed healthcare providers within their scope of practice and with appropriate qualifications in their disciplinary fields who are licensed to practice medicine in the state in which care is being provided. In the case of physicians, the physician must be AOA or ABMS board certified/eligible to serve as a preceptor or clinical faculty member.

Any licensed healthcare provider, as defined above, who is designated as a teacher for CCOM students, is recognized to be a member of the extended faculty. Any health professional providing health services to a student, through a therapeutic relationship, must recuse him/herself from the academic assessment or promotion of the student receiving those health services.

## SCHOLARSHIPS FOR ENROLLED STUDENTS

There are a number of scholarships for enrolled CCOM students. Access the list at:  
<https://www.midwestern.edu/admissions/tuition-and-financial-aid/scholarships.xml>

## MWU/OPTI: MIDWESTERN UNIVERSITY OSTEOPATHIC POSTDOCTORAL TRAINING INSTITUTION

*Historical match rates to graduate medical education programs accredited by the American Osteopathic Association, Accreditation Council for Graduate Medical Education or the military can be found on the CCOM Fast Facts webpage at*  
<https://www.midwestern.edu/academics/degrees-and-programs/doctor-of-osteopathic-medicine-il.xml>

Through membership in the MWU/OPTI, CCOM offers a continuity of osteopathic medical education from the first year of medical school to the final year of postdoctoral training, all in the Chicagoland area.

Internships, residency and fellowship programs cover a wide spectrum of medical specialties. Encompassing one of the nation's largest sets of postdoctoral programs dedicated to the osteopathic philosophy of medicine, the CCOM and MWU/OPTI medical education continuum is broad reaching in scope, resulting in a multifaceted approach to graduate medical education. With unique predoctoral and postdoctoral teaching and training opportunities at some of the finest healthcare facilities in the US, CCOM and MWU/OPTI affiliated hospitals consistently lead the nation in technology, treatment and care.

MWU/OPTI postdoctoral programs include residencies in primary disciplines, fellowship programs in many subspecialties, and traditional internships. Programs follow the guidelines of and receive accreditation from the Bureau of Osteopathic Education of the American Osteopathic Association. MWU/OPTI received Initial Accreditation from the Accreditation Council for Graduate Medical Education (ACGME) as an institutional sponsor effective July 1, 2015.

## THE AOA CODE OF ETHICS

The American Osteopathic Association has formulated this Code to guide its member physicians in their professional lives. The standards presented are designed to address the osteopathic physician's ethical and professional responsibilities to patients, to society, to the AOA, to others involved in healthcare and to self.

Further, the American Osteopathic Association has adopted the position that physicians should play a major role in the development and instruction of medical ethics.

**Section 1.** The physician shall keep in confidence whatever she/he may learn about a patient in the discharge of professional duties. Information shall be divulged by the physician when required by law or when authorized by the patient.

**Section 2.** The physician shall give a candid account of the patient's condition to the patient or to those responsible for the patient's care.

**Section 3.** A physician-patient relationship must be founded on mutual trust, cooperation, and respect. The patient, therefore, must have complete freedom to choose her/his physician. The physician must have complete freedom to choose patients whom she/he will serve. However, the physician should not refuse to accept patients for reasons of discrimination, including, but not limited to, the patient's race, creed, color, sex, national origin, sexual orientation, gender identity or handicap. In emergencies, a physician should make her/his services available.

**Section 4.** A physician is never justified in abandoning a patient. The physician shall give due notice to a patient or to those responsible for the patient's care when she/he withdraws from the case so that another physician may be engaged.

**Section 5.** A physician shall practice in accordance with the body of systematized and scientific knowledge related to the healing arts. A physician shall maintain competence in such systematized and scientific knowledge through study and clinical applications.

**Section 6.** The osteopathic medical profession has an obligation to society to maintain its high standards and, therefore, to continuously regulate itself. A substantial part of such regulation is due to the efforts and influence of the recognized local, state and national associations representing the osteopathic medical profession. A physician should maintain membership in and actively support such associations and abide by their rules and regulations.

**Section 7.** Under the law a physician may advertise, but no physician shall advertise or solicit patients directly or indirectly through the use of matters or activities which are false or misleading.

**Section 8.** A physician shall not hold forth or indicate possession of any degree recognized as the basis for licensure to practice the healing arts unless he is actually licensed on the basis of that degree in the state in which she/he practices. A physician shall designate her/his osteopathic school of practice in all professional uses of her/his name. Indications of specialty practice, membership in professional societies,

and related matters shall be governed by rules promulgated by the American Osteopathic Association.

**Section 9.** A physician should not hesitate to seek consultation whenever she/he believes it advisable for the care of the patient.

**Section 10.** In any dispute between or among physicians involving ethical or organizational matters, the matter in controversy should first be referred to the appropriate arbitrating bodies of the profession.

**Section 11.** In any dispute between or among physicians regarding the diagnosis and treatment of a patient, the attending physician has the responsibility for final decisions, consistent with any applicable hospital rules or regulations.

**Section 12.** Any fee charged by a physician shall compensate the physician for services actually rendered. There shall be no division of professional fees for referrals of patients.

**Section 13.** A physician shall respect the law. When necessary a physician shall attempt to help to formulate the law by all proper means in order to improve patient care and public health.

**Section 14.** In addition to adhering to the foregoing ethical standards, a physician shall recognize a responsibility to participate in community activities and services.

**Section 15.** It is considered sexual misconduct for a physician to have sexual contact with any current patient whom the physician has interviewed and/or upon whom a medical or surgical procedure has been performed.

**Section 16.** Sexual harassment by a physician is considered unethical. Sexual harassment is defined as physical or verbal intimation of a sexual nature involving a colleague or subordinate in the workplace or academic setting, when such conduct creates an unreasonable, intimidating, hostile or offensive workplace or academic setting.

**Section 17.** From time to time, industry may provide some AOA members with gifts as an inducement to use their products or services. Members who use these products and services as a result of these gifts, rather than simply for the betterment of their patients and the improvement of the care rendered in their practices, shall be considered to have acted in an unethical manner.

**Section 18.** A physician shall not intentionally misrepresent himself/herself or his/her research work in any way.

**Section 19.** When participating in research, a physician shall follow the current laws, regulations and standards of the United States or, if the research is conducted outside the United States, the laws, regulations and standards applicable to research in the nation where the research is conducted. This standard shall apply for physician involvement in research at any level and degree of responsibility, including,

but not limited to, research, design, funding, participation either as examining and/or treating provider, supervision of other staff in their research, analysis of data and publication of results in any form for any purpose.

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Lake Erie College of Osteopathic Medicine  
Clinical Assistant Professor

## OSTEOPATHIC MANIPULATIVE MEDICINE FACULTY

### **Roseann Brady, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

### **Martha Calden, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

### **Daniel T. Davison, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

### **Kurt P. Heinking, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Chair, Department of OMM  
Professor

### **Mark E. McKeigue, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Professor

### **Frank R. Serrecchia, D.O., RDH**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

## PATHOLOGY FACULTY

### **Hilal Arnouk, M.D., Ph.D.**

The State University of New York at Buffalo  
Assistant Professor

### **Louis W. Gierke, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Professor Emeritus

### **John N. Kasimos, D.O., M.S.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Chair, Department of Pathology  
Professor

### **Luigi Strizzi, M.D., Ph.D.**

University of Chieti-Pescara, Italy  
Associate Professor

## PEDIATRICS FACULTY

### **Sonia Antony, M.D.**

Government Medical College, Nagpur, India  
Clinical Assistant Professor

### **Eric Culp, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

### **Prashant Deshpande, M.D.**

University of Bombay, India  
Clinical Assistant Professor

### **Gene Denning, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

### **Michael DeStefano, M.D.**

Rush University  
Rush Medical College  
Clinical Assistant Professor

### **Timothy Halt, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

### **Dalia K. Irons, D.O.**

Des Moines University  
College of Osteopathic Medicine  
Clinical Assistant Professor

### **Catherine A. Macyko, M.D.**

Uniformed Services University of Health Sciences  
Clinical Assistant Professor  
Section Director of Pediatrics

### **Paul A. Panzica, M.D.**

Southern Illinois University  
School of Medicine  
Clinical Assistant Professor

### **Shobhana Ravikumar, M.D.**

Madras Medical College, India  
Clinical Assistant Professor

### **Frank Serrecchia, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Associate Professor

## PHARMACOLOGY FACULTY

### **Kirk Dineley, Ph.D.**

University of Pittsburgh  
Professor

### **Joshua R. Edwards, Ph.D.**

Michigan State University  
Professor

**Michael J. Fay, Ph.D.**  
University of Mississippi  
Associate Dean, College of Graduate Studies  
Professor

**Keith B. Glaser, Ph.D.**  
University of California at Santa Barbara  
Clinical Professor

**Phillip Kopf, Ph.D.**  
University of New Mexico  
Chair, Department of Pharmacology  
Associate Professor

**Alejandro M. Mayer, Ph.D.**  
University of Buenos Aires, Argentina  
Professor

**Marsha Pierce, Ph.D.**  
Creighton University  
Assistant Professor

**Walter C. Prozialeck, Ph.D.**  
Thomas Jefferson University  
Professor

**Prasanth Puthanveetil, Ph.D.**  
University of British Columbia  
Assistant Professor

## PHYSIOLOGY FACULTY

**Mae J. Ciancio, Ph.D.**  
Loyola University Chicago  
Program Coordinator, Master of Biomedical Science,  
Biomedical Sciences Program  
Associate Professor

**Kyle K. Henderson, Ph.D.**  
Kansas University Medical Center  
Associate Professor

**Kathy J. LePard, Ph.D.**  
The Ohio State University  
Director, Biomedical Science Program  
Professor

**Rafael Mejia-Alvarez, M.D., Ph.D.**  
Universidad Nacional Autónoma de México School of  
Medicine, Mexico  
Baylor College of Medicine  
Professor

**Paul F. McCulloch, Ph.D.**  
University of Saskatchewan, Canada  
Professor

**Kathleen P. O'Hagan, Ph.D.**  
Rutgers, The State University of New Jersey  
Chair, Department of Physiology  
Professor

**Maura Porta, Ph.D.**  
Loyola University Chicago  
Assistant Professor

**Fred D. Romano, Ph.D.**  
Loyola University of Chicago  
Dean, College of Health Sciences (Downers Grove, IL)  
Professor

**Jacquelyn M. Smith, Ph.D.**  
University of Michigan  
Dean, College of Health Sciences (Glendale, AZ)  
Professor

**Gordon M. Wahler, Ph.D.**  
University of Minnesota  
Professor

## BEHAVIORAL SCIENCES/PSYCHIATRY FACULTY

### *Behavioral Sciences*

**Mireille Rizkalla, Ph.D.**  
University of Northern British Columbia, Canada  
Assistant Professor

### *Psychiatry*

**Dawit Amare, D.O.**  
University of New England College of Osteopathic Medicine  
Clinical Instructor

**Emma Cabusao, M.D.**  
Loyola University Medical Center  
Clinical Instructor

**Sandy Rhee, D.O.**  
Midwestern University  
Chicago College of Osteopathic Medicine  
Chair, Department of Psychiatry  
Clinical Assistant Professor

## SURGERY FACULTY

**Shabir Abadin, M.D.**  
Northwestern University  
Feinberg School of Medicine  
Clinical Assistant Professor

**Raed Abusuwwa, D.O.**  
A.T. Still University  
Kirksville College of Osteopathic Medicine  
Clinical Assistant Professor

**Thomas Cartolano, D.O.**  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor



**Andrew Dennis, D.O.**

Kansas City University of Medicine and Biosciences  
College of Osteopathic Medicine  
Chair, Department of Surgery  
Clinical Assistant Professor

**Scott Donnelly, D.O.**

Michigan State University  
College of Osteopathic Medicine  
Clinical Assistant Professor

**Joseph Durham, M.D.**

Tulane University  
School of Medicine  
Clinical Assistant Professor

**Maria Gomez, M.D.**

University of Illinois, Chicago  
College of Medicine  
Clinical Assistant Professor

**Elizabeth Gwinn, M.D.**

Wayne State University  
School of Medicine  
Clinical Assistant Professor

**Justin Karush, D.O.**

New York Institute of Technology  
College of Osteopathic Medicine  
Clinical Assistant Professor

**Nathaniel Koo, M.D.**

University of Illinois at Chicago  
College of Medicine  
Clinical Assistant Professor

**Patrick Maluso, M.D.**

University of Texas Southwestern  
School of Medicine  
Clinical Assistant Professor

**Elizabeth Marcus, M.D.**

University of Pittsburgh  
School of Medicine  
Clinical Assistant Professor

**Neil Mayer, D.O.**

Nova Southeastern University  
College of Osteopathic Medicine  
Clinical Assistant Professor

**Albert Milford, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Professor

**Justin Mis, B.S.N.**

Purdue University  
School of Nursing  
Clinical Assistant Professor

**Thomas Patrianakos, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

**Stathis Poulakidas, M.D.**

Rosalind Franklin University  
Chicago Medical School  
Clinical Assistant Professor

**Paul S. Ray, D.O.**

Des Moines University  
College of Osteopathic Medicine  
Clinical Professor

**Victor Romano, M.D.**

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Stritch School of Medicine  
Clinical Assistant Professor

**Victoria Schlanser, D.O.**

A.T. Still University  
Kirksville College of Osteopathic Medicine  
Course Director  
Clinical Assistant Professor

**Frederic Starr, M.D.**

Thomas Jefferson University  
Sidney Kimmel Medical College  
Clinical Assistant Professor

**Leah Tatebe, M.D.**

University of Texas Southwestern  
School of Medicine  
Clinical Assistant Professor

# CHICAGO COLLEGE OF PHARMACY

## MISSION

Midwestern University Chicago College of Pharmacy fosters lifelong learning through excellence in education, postgraduate programs, and scholarship. The College encourages the development of professional attitudes and behaviors to prepare pharmacists who will provide exemplary patient-centered care in a culturally diverse society.

## VISION

The Chicago College of Pharmacy will lead advances in pharmacy education, practice and scholarship through innovation and collaboration to meet the health care challenges of tomorrow.

## CORE VALUES

The Chicago College of Pharmacy embraces the values of learning and discovery, excellence, professionalism, and collegiality in everything that we do: teaching, patient care, research, and service.

## ACCREDITATION

The Midwestern University Chicago College of Pharmacy's Doctor of Pharmacy (Pharm.D.) degree program is accredited by the Accreditation Council for Pharmacy Education (ACPE), 190 S. LaSalle Street, Suite 2850, Chicago, IL 60603; 312/664-3575, Fax 866/228-2631; website [www.acpe-accredit.org](http://www.acpe-accredit.org).

## DEGREE DESCRIPTION

The College's Pharm.D. Program provides students with enhanced experiences in the biomedical, pharmaceutical, and clinical sciences. For students entering in Fall 2016 or after, the program requires 5.5 years of coursework, the first two years at another college and the final three and one half years full-time at CCP (Standard Graduation Option). Students entering in Fall 2019 and 2020 also have the option of completing the program in 5 years, the first two years at another college and the final three calendar years full-time at CCP (Accelerated Graduation Option). Students entering in Summer 2021 will be enrolled in the standard three-year program. The maximum allotted time for completion of the

professional portion of the Pharm.D. program is six calendar years.

## CURRICULUM OUTCOMES

At the conclusion of the Pharm.D. Program, all graduates will achieve the following outcomes:

1. Demonstrate professionalism
2. Demonstrate critical thinking and problem solving skills
3. Communicate effectively
4. Practice evidence-based decision-making
5. Practice patient-centered care
6. Promote health and wellness
7. Manage medication use systems
8. Manage a pharmacy practice
9. Contribute to the interprofessional healthcare environment

## ADMISSIONS

CCP considers for admission applicants who possess the academic and professional promise necessary for development as outstanding members of the pharmacy profession. The CCP admissions environment is selective; approximately 600 applications were received in 2019.

Applications received on or before the application deadline are reviewed to determine applicant eligibility for an on-campus interview. Within its competitive admissions framework, CCP uses multiple criteria to select the most qualified candidates. Cumulative grade point average (GPA), science GPA, letters of recommendation, written communication skills, verbal communication skills, health care experience, knowledge of the profession, and motivation for choosing pharmacy careers are considered when reviewing an applicant's file.

### Admission Requirements

Students seeking admission to CCP must submit the following documented evidence:

1. Completion of 62 semester hours or 90 quarter hours of nonremedial, prerequisite coursework from regionally accredited U.S. colleges or universities, or recognized postsecondary Canadian institutions that

use English as its primary language of instruction and documentation.

- Preferred minimum cumulative GPA and science GPA of 2.50 on a 4.00 scale
  - Grades of "C" or better for prerequisite courses (grades of C- are not acceptable)
2. No Pharmacy College Admissions Test (PCAT) score is required for admission, however if an applicant's cumulative and science GPAs are below 2.75, then the submission of PCAT scores is preferred to enhance the application.
    - Scores may be submitted to the Pharmacy College Application Service (PharmCas) using PCAT code 104
    - PCAT exams are offered multiple times per year by Harcourt Assessment, Inc., (also known as Pearson), 800/622-3231 or [www.pcatweb.info](http://www.pcatweb.info)
    - Applicants currently applying to another college within Midwestern University may have scores from the MCAT, DAT, OAT, or GRE transferred, if their cumulative and science GPAs are below 2.75
    - Current MWU students wishing to apply to the college of pharmacy may have scores from the MCAT, DAT, OAT, or GRE transferred, if their cumulative and science GPAs are below 2.75
    - Only scores earned from the test offered in 2016 or more recently are acceptable
  3. Demonstration of a people or service orientation as evidenced by community service or extracurricular activities
  4. Motivation for and commitment to the pharmacy profession as demonstrated by previous work, volunteer work, or other life experiences
  5. Oral and written communication skills necessary to interact with patients and colleagues
  6. Completion of the CCP on-campus interview process (by invitation only)
  7. Satisfactory Midwestern University criminal background check
  8. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy

The Pharm.D. Program at CCP is rigorous and challenging. The CCP Admissions Committee will therefore assess the quality and rigor of the prepharmacy academic records presented by applicants. When assessing the prepharmacy academic records of applicants, the Admissions Committee will:

1. View applicants with cumulative GPAs below 2.75 on a 4.00 scale with particular concern. Although 2.50 on a 4.00 scale is the preferred minimum

cumulative GPA for admission consideration, higher cumulative GPAs are more competitive and recommended.

- The average cumulative GPA of applicants admitted for Fall 2019 was 3.18 on a 4.00 scale
2. When submitted, view component and composite PCAT scores below average with particular concern, although there are no minimum PCAT scores and a PCAT score is not required for admission.
  3. View with concern applicants whose prepharmacy math and science coursework was completed longer than 10 years ago.
    - More recent (within four years) prepharmacy math and science coursework is preferred
  4. Consider the reputation for quality and rigor of the institutions where applicants have taken previous coursework, the extent of completion of science prerequisites, the credit load carried per term, the difficulty level of previous coursework, and trends in applicant grades.

## Prerequisite Courses

Courses	Semester Hours	Quarter Hours
Biology with labs	8	12
Human or Vertebrate Anatomy	3	4
General Chemistry with labs	8	12
Organic Chemistry with labs	8	12
Physics (mechanics, heat, force and motion must be included in the course)	3	4
Calculus (integral & differential)	3	4
English Composition	6	9
Speech/Public Speaking	3	4
Economics	3	4
Statistics (general statistics or biostatistics)	3	4
Social and Behavioral Science Electives (Any two courses within the areas of psychology, sociology, anthropology, or political science).	6	9
General Education Electives (Any three courses not related to science, math, physical education, or health care. Recommended courses include arts and humanities, foreign language, and business and computer courses.)	8	12
Total	62	90

## Application Process and Deadlines

### 1. PharmCAS Application:

Applicants are required to submit a completed Pharmacy College Application Service (PharmCAS) application and pay application fees to PharmCAS by **April 1, 2021**. In addition to the online application and application fees, applicants must forward to PharmCAS official transcripts from all colleges and universities attended by the April 1st date. PharmCAS will not consider an application complete and will not begin the verification process until all official transcripts are received. (Students who have taken coursework and/or earned a degree from a foreign institution must also submit an evaluation of their transcripts from an approved

foreign transcript evaluation service).

Students must apply for admission via the Pharmacy College Application Service (PharmCAS) at [www.PharmCAS.org](http://www.PharmCAS.org). Please refer to the PharmCAS application instructions for specific details about completing the PharmCAS application, required documents, and processing time. PharmCAS applications are typically available beginning in June of the academic year preceding the year in which the applicant plans to matriculate. Students are strongly encouraged to complete their PharmCAS application early in the cycle. CCP will consider completed applications on a first-come, first-served basis until all seats are filled.

### 2. Pharmacy College Admissions Test:

No PCAT score is required for admission, however it is preferred that applicants whose cumulative and science GPAs are below 2.75 arrange for scores from the PCAT to be sent directly to PharmCAS using PCAT code 104. **Only** test scores received directly from PharmCAS and scores earned from the test offered in 2016 or more recently will be accepted. This exam is offered by Harcourt Assessment, Inc., (also known as Pearson), 800-622-3231; [www.pcatweb.info](http://www.pcatweb.info). The exam is typically offered four times per year. It is recommended that 1st time PCAT test takers should take the exam no later than January 2021. Please check with Harcourt Assessment, Inc. for the exam dates.

Applicants currently applying to another college within Midwestern University may have scores from the MCAT, DAT, OAT, or GRE transferred, which is preferred if their cumulative and science GPAs are below 2.75. Current MWU students wishing to apply to the college of pharmacy may have scores from the MCAT, DAT, OAT, or GRE transferred, which is preferred if their cumulative and science GPAs are below 2.75.

### 3. Letters of Recommendation:

Applicants must submit two letters of recommendation from professionals to PharmCAS ([www.PharmCAS.org](http://www.PharmCAS.org)). The Office of Admissions will **only** accept letters of recommendation received directly from PharmCAS. One letter should be written by a college professor who has actually taught the student or by a prehealth advisor. It is preferred that the second letter be written by a pharmacist. However, any one of the following recommenders is also acceptable: prehealth advisor, science professor, or another health care professional who knows the applicant well. Please refer to the PharmCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.

### 4. Completed Applications:

All application materials, including the PharmCAS application, official transcripts (as submitted to PharmCAS), PCAT scores (preferred if cumulative

and science GPAs are below 2.75) and two letters of recommendation (as submitted to PharmCAS), must be received in the Office of Admissions on or before **May 1, 2021**. Only completed applications received by the Office of Admissions on or before the deadline date will be reviewed for potential entrance into the program.

*Please Note:* Applicants are responsible for tracking the receipt of their application materials and verifying the status of their applications on the University website. The Office of Admissions will send qualified applicants instructions for checking the status of their application materials online.

Applicants are also responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address.

Midwestern University  
Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
630-515-7200; 800-458-6253  
admissil@midwestern.edu

### **Rolling Admissions**

The Chicago College of Pharmacy uses a rolling admissions process in which applications are processed and reviewed during regular intervals in the admissions cycle until the class is filled.

### **Interview Process**

Before invitations are issued to attend an on-campus interview, applicants must meet the admission requirements listed previously. After the Office of Admissions receives required application materials, applicant files are reviewed to determine whether applicants merit invitations to attend an interview. Applicants may also be placed on a waiting list pending possible openings toward the end of the admissions cycle. Visits are typically held between September and April. Invited applicants must attend an interview to achieve further consideration in the admissions process.

Candidates will be required to participate in a interview with other pharmacy applicants. Interviews will be used to evaluate verbal communication skills, understanding of the pharmacy profession, commitment to patient care, and other elements as determined by faculty. Applicants will be required to participate in writing sample exercises during the visit. Visits also provide opportunities for candidates to learn more about the pharmacy program, financial aid, student services, as well as tour the Midwestern University campus and pharmacy school facilities.

Following applicant visits, only completed files are forwarded to the Admissions Committee for review. The committee may recommend to accept, deny, or place students on the alternate list. Recommendations are then forwarded to

the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status shortly after their visit.

All requests for application withdrawals must be made in writing.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses. [The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient/client]
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 lbs vertically and horizontally.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an

effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### Early Assurance Programs

These offer applicants the opportunity to gain an early acceptance into Midwestern University's Chicago College of Pharmacy (CCP) and **complete prerequisite courses at an affiliated school**. If all program requirements are fulfilled, then applicants earn a seat in CCP and may then begin the three-year Doctor of Pharmacy curriculum.

### Affiliated Schools

There are affiliation agreements with the following schools for the completion of prerequisite courses:

Four-Year Institutions for the Dual Acceptance Program (DAP):

- Benedictine University - Lisle, IL
- Dominican University - River Forest, IL
- Elmhurst College - Elmhurst, IL
- Hebrew Theological College - Skokie, IL
- Illinois Institute of Technology - Chicago, IL
- Lewis University - Romeoville, IL
- Loyola University Chicago - Chicago, IL
- Rockford University - Rockford, IL

- University of Saint Francis - Fort Wayne, IN
- University of Wisconsin-Milwaukee - Milwaukee, WI

Community Colleges for the Pre-Pharmacy Advantage Program (PPA):

- College of DuPage - Glen Ellyn, IL
- Moraine Valley Community College - Palos Hills, IL
- Prairie State College - Chicago Heights, IL

### Available Tracks

#### Track 1:

- Must be a senior in high school at the time of application.
- Apply to one or more of the affiliate schools and later gain acceptance (choose one school to attend).
- Refer to GPA requirements in the section below.
- Achieve one of these scores on college entrance exams:
  - ACT of 24 or higher (submit scores directly using code 6400)
  - SAT of 1190 or higher (submit scores directly using code 3788)
- Completed application and official high school transcripts are due to Midwestern University on the following dates:
  - Early Decision: November 1st
  - Regular Decision: February 15th
- All pre-pharmacy coursework must be completed within two years at the chosen affiliate school.

#### Track 2:

- Must be a full-time first-year student (freshman) already attending one of the affiliate schools at the time of application.
- Refer to GPA requirements below.
- Completed application and official affiliate school transcripts are due on **June 6th**. Transcripts must reflect two semesters of full-time coursework at the affiliate school.
- All pre-pharmacy coursework must be completed within two years at the affiliate school from the time of Early Assurance Program acceptance.

Applicants should additionally reflect a motivation for and commitment to the pharmacy profession. Upon review of completed applications and submitted transcripts, invitations for participation in Interview Day will be extended, after which conditional admission decisions are rendered.

### GPA Requirements

All grade-point averages (GPAs) shown are based on a 4.0 scale.

#### Dual Acceptance Program (DAP):

Track 1:

Required for admission into EAP: 3.2<sup>1</sup>

Required for transfer into MWU-CCP<sup>3</sup>: 3.0

Track 2:

Required for admission into EAP: 3.0<sup>2</sup>

Required for transfer into MWU-CCP<sup>3</sup>: 3.0

#### Pre-Pharmacy Advantage Program (PPA):

Track 1:

Required for admission into EAP: 3.0<sup>1</sup>

Required for transfer into MWU-CCP<sup>3</sup>: 3.2

Track 2:

Required for admission into EAP: 3.2<sup>2</sup>

Required for transfer into MWU-CCP<sup>3</sup>: 3.2

<sup>1</sup>Weighted cumulative high school GPA

<sup>2</sup>From two semesters of full-time college coursework at the affiliate school

<sup>3</sup>A minimum 2.5 GPA in science courses must also be achieved in addition to other program requirements for Early Assurance transfer into Midwestern University's Chicago College of Pharmacy.

### Applications and Admissions Process

Eligible students may access the free applications via the Website: [www.midwestern.edu/EAP](http://www.midwestern.edu/EAP)

Track 1 Application - Deadline: **November 1st** (early decision) or **February 15th** (regular decision). To apply to affiliate schools for the pre-pharmacy coursework, please contact the institution(s) directly. If applying to more than one affiliate school, this can be designated in the application.

In addition, college entrance exam scores must be forwarded directly to Midwestern University with the following codes:

ACT: **6400**

SAT: **3788**

Track 2 Application - Deadline: **June 6th**

**For both tracks**, official transcripts should be forwarded to: Midwestern University, Office of Admissions, 555 31st Street, Downers Grove, IL 60515. (Transcripts for Track 2 applicants should reflect two semesters of full-time coursework at the affiliate school).

After the Midwestern University Office of Admissions receives all completed application materials, applicant files are reviewed to determine which applicants merit invitations to attend an on-campus Interview Day.

During the Interview Day, candidates will:

- Participate in personal interviews to evaluate verbal communication skills, understanding of the pharmacy profession, commitment to patient care, and other elements as determined by faculty.
- Participate in a writing sample exercise.
- Learn more about the pharmacy program, student services, as well as tour the Midwestern University campus and pharmacy school facilities.

Following applicant visits, applicant files are forwarded to the Admissions Committee for review. The committee may recommend to accept or to deny student admissions. These recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status within two weeks of their visits. Accepted applicants will be ensured a seat at CCP upon successful completion of the program requirements.

### Program Conditions

All five of the following academic conditions must be met to retain admission to CCP for the respective summer quarter. If any conditions are **not** met, then the student will no longer be a participant in the Early Assurance Program and will be encouraged to apply to MWU CCP via the traditional application.

#### Condition #1

All pre-pharmacy prerequisite courses must be completed at the affiliated college or university within a two-year period for Track 1 students, and within two years upon acceptance into the Early Assurance Program for Track 2 students. (All courses must be completed by end of summer just before transition into CCP.) Refer to the appropriate required coursework for a particular affiliated college or university.

- Students cannot take summer classes at another college or university, even if that school is an Early Assurance Program (DAP or PPA) affiliate school.
- Note that some affiliated colleges or universities require placement exams and have special requirements for students who earn advanced placement credit.
- Some exceptions to the "affiliate college or university only" rule may apply. For example: Recognized AP credit granted for work completed prior to beginning at the affiliated college or university. If the institution recognizes and grants a student credit and the credit appears on that student's transcript, then that credit will be accepted.

#### Condition #2

Minimum cumulative grade point averages (GPAs) must be achieved and maintained to remain in the program, as follows:

- Four-year school students (DAP program)– Must achieve a **3.0** cumulative GPA at the conclusion of each spring semester.
- Community college students (PPA Program)– Must achieve a **3.2** cumulative GPA at the conclusion of each fall and spring semester.
- Only courses taken at the affiliated college or university are to be used in the final cumulative GPA calculation.

#### Condition #3

A minimum pre-pharmacy science grade point average (GPA) of 2.50 must be also achieved and maintained.

#### Condition #4

Student must earn a grade of C or higher in all required prerequisite courses. Grades of C- (minus) are not accepted.

#### Condition #5

Students are not permitted to repeat courses for a higher grade.

#### **In addition to meeting these academic conditions, Early Assurance Program students must:**

- Upon acceptance, submit a signed Letter of Understanding to the Midwestern University Admissions Office.
- Complete and submit a modified PharmCAS application, which will include the submission of transcripts for coursework completed at the affiliate school.
- Sign and return a Chicago College of Pharmacy Matriculation Agreement and Technical Standards Certification Form. Both of these agreements will be sent to qualified students in the fall before their completion of their pre-pharmacy coursework in the following spring. The Matriculation Agreement will outline deposit requirements, final transcript submission, proof of immunizations, proof of insurance, and mandatory health testing requirements.
- Submit required matriculation deposit fee (amount and deadline date will be designated in Matriculation Agreement.)

In order to enhance their performance when later attending CCP, students should consider these additional experiences:

- Involvement in extracurricular/leadership activities in the community or affiliated college or university.
- Volunteer or paid healthcare experiences (pharmacy, if possible)

#### **Progress Checks**

Program students should meet with their affiliated college or

university's assigned academic advisor every semester. The advisor monitors the progress of students and will advise CCP of any students failing to meet the requirements.

Any student who fails to meet the program requirements will be encouraged to apply to CCP via the traditional route (submit PCAT scores, if the cumulative or science GPA is below 2.75). **NOTE**, the traditional application process is competitive, hence former Early Assurance Program students must compete for available seats and are not guaranteed admission via this route.

#### **Additional Agreements**

The following agreements are **not** associated with the Early Assurance Programs (DAP and PPA). These are additional early assurance opportunities during the application process.

#### **Benedictine University's MSIP Program Applicants**

Students currently enrolled in Benedictine University's Master of Science in Integrative Physiology (MSIP) program may be eligible for a guaranteed interview as an applicant to Midwestern University's Chicago College of Pharmacy's Pharm.D. program. To qualify for a guaranteed interview as part of the application process, the following criteria must be met:

- Meet all traditional admission requirements of Midwestern University's pharmacy program.
- Apply for admission to Midwestern University using PharmCAS by the March 1st deadline for Summer enrollment at Midwestern University immediately following the completion of the MSIP at Benedictine.
- Have an MSIP program GPA of 3.5 or higher at the time of application to Midwestern University.
- No final course grade less than a "C" in Benedictine University's MSIP program.
- Have a Cumulative Overall GPA of 3.2 or higher, including courses taken in Benedictine University's MSIP program.
- Submit PCAT scores as preferred, if the student has a cumulative and science GPA below 2.75.
- Be recommended by the Director of the MSIP program with an additional letter from a professional or academic reference.
- Patient contact experience is highly recommended, particularly to demonstrate a discernment process to enter the pharmacy profession.
- All applicants must meet Midwestern University's technical standards, which is essential to delineate the psychomotor, cognitive and affective skills needed for matriculation into, continuation in, and graduation from the educational program.
- If accepted into the program, must meet all other enrollment requirements including but not limited to medical, criminal background, and substance abuse clearance.



### **Arizona Christian University Applicants**

Students currently enrolled in Arizona Christian University, you may be eligible for a guaranteed interview as an applicant to Midwestern University's Chicago College of Pharmacy's Pharm.D. program. To qualify for a guaranteed interview as part of the application process, students must meet the following criteria:

- Achieve a minimum of a 3.25 cumulative grade point average (on a 4.00 scale) in undergraduate coursework (with a 3.25 cumulative grade point average in sciences).
- Submit scores from the Pharmacy College Admissions Test (PCAT) during the previous five years of the current admission cycle, as preferred if the student has a cumulative and science GPA below 2.75.
- Have completed the minimum number of the prerequisite courses (as stated in the Midwestern University Catalog) in the prescribed subject areas at a regionally accredited college or university with a grade of C or better before the program begins.
- Have the ability to successfully fulfill all technical standards for the respective College.
- Receive satisfactory scores at the interview with the MWU Admissions Committee members on the day of the admissions interview.
- Demonstrate a good understanding of and a sincere interest in pharmacy, including shadowing at least one pharmacy professional prior to admission.
- Personal integrity and sound moral character.
- Reflect a people/service orientation through community service or extracurricular activities.
- Abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
- Pass a criminal background check.
- Meet all other requirements set forth by MWU, including requirements documented in the catalog and student handbook.

### **Reapplication Process for the Pharm.D. Program**

After receiving a denial letter, applicants may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of an admissions counselor. To initiate the reapplication process, students must submit their applications to PharmCAS. Applications are then processed by the standard application procedures.

### **Transfer Admission from Another Pharmacy School**

CCP may accept transfer students from other ACPE-accredited pharmacy schools who are currently enrolled, are in good academic standing, and provide legitimate reasons for seeking transfer. Accepted transfer students will be considered for a seat in either the SGO (Standard Graduation Option) or AGO (Accelerated Graduation Option) Program.

Placement in the AGO will be based on availability at the time of admission.

Transfer applicants should not apply via PharmCAS.

All requests for transfer information should be referred to the CCP Dean's Office, where potential transfer applicants can be counseled prior to receiving and submitting applications.

Students requesting transfers must meet the College's general requirements for admission. They must also submit the following documents by April 1:

1. A letter to the Dean or Director of Admissions outlining their reasons for requesting transfer and explaining any difficulties encountered at their current institution.
2. A completed CCP transfer application.
3. Official transcripts from all schools attended—undergraduate, graduate, and professional.
4. Catalogs and detailed pharmacy syllabi for any courses for which advanced standing consideration is requested.
5. A letter from the Dean of the college of pharmacy in which the student is enrolled that describes their current academic status and terms of withdrawal or dismissal.
6. One letter of recommendation from a faculty member at the current college of pharmacy.
7. Additional documents or letters of recommendation as determined by the Director of Admissions or Dean.

The Office of Admissions will collect and forward student portfolios to the CCP Dean's Office for review. When reviews are positive, candidates will be invited for an interview. As part of their visit, candidates will be required to participate in an interview to evaluate verbal communication skills, understanding of the pharmacy profession, commitment to patient care, and other elements as determined by faculty. Applicants will be required to participate in writing sample exercises during the visit. Visits will also provide candidates with opportunities to learn more about the pharmacy program, financial aid, and student services, and to tour the Midwestern University campus.

Following applicant visits, files are forwarded to the Admissions Committee for review. The Committee may recommend to accept, deny, or place the student on the alternate list. Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status within two to four weeks of the visit. When transferring students are admitted and request advanced standing, the CCP Dean's Office will forward students' requests to the Student Promotion and Graduation Committee (see relevant section below). No advanced standing credit will be awarded for

professional pharmacy coursework completed at foreign colleges of pharmacy.

PCAT scores are optional and may be provided by transfer student applicants.

### **Readmission After Dismissal for Poor Academic Performance**

Students dismissed for poor academic performance may reapply for admission and will be considered for a seat in either the SGO (Standard Graduation Option) or AGO (Accelerated Graduation Option) Program. Placement in the AGO will be based on availability at the time of admission as well as the readmitted student's determined academic program plan to CCP if they:

1. Complete at least two semesters or three quarters of full-time study (i.e., at least 12 credit hours per semester or quarter) at an advanced prepharmacy level or higher at regionally accredited U.S. colleges or universities after seeking academic counseling from the CCP Dean's Office. The Dean will inform students of the Student Promotion and Graduation Committee's recommendations.
2. Maintain a cumulative GPA of 2.50 or better for the two semesters or three quarters of full-time study at the advanced prepharmacy level or higher.
3. Earn at least a grade of "C" in all courses taken. Grades of C- (minus) are not accepted.

Students fulfilling these requirements will be permitted to reapply to the University and to the College. Students should obtain applications from the CCP Dean's Office (not through PharmCAS). The application deadline is April 1st. Completed applications of reapplying PS-I students will be forwarded by the CCP Dean's Office to the Admissions Committee for review and recommendations. Completed applications of reapplying PS-II, PS-III, or PS-IV students will be forwarded by the CCP Dean's Office to the Student Promotion and Graduation Committee for review and recommendations. Each committee's recommendations are forwarded to the Dean for action.

No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants.

Reapplications are allowed only within the first two years following dismissal. Readmission will be granted only once.

## **GRADUATION REQUIREMENTS FOR THE DOCTOR OF PHARMACY (PHARM.D.) PROGRAM**

To qualify for graduation, a student must have satisfied the following requirements:

1. Successfully completed a minimum of 90 quarter hours or 62 semester hours of credit of prerequisite coursework, as stipulated for admission to the program.
2. Successfully completed the program of professional and experiential coursework approved by the CCP faculty and Dean.
3. Attained a cumulative grade point average of 2.000 for all requisite professional and experiential coursework at the College.
4. Achieved a cumulative Advanced Pharmacy Practice Experience grade point average of 2.000 or greater.
5. Repeated, upon approval, and earned a passing grade for any required courses in the professional program for which a grade of "F" has been issued.
6. Successfully completed, at a minimum, the last five didactic quarters and all Advanced Pharmacy Practice Experiences at CCP.
7. Been recommended for the degree by a majority vote of the Student Promotion and Graduation Committee.
8. Settled all financial accounts with the University.
9. Attended the commencement exercises for conferral of the degree, unless excused by the Dean.

Candidates for graduation must exhibit good moral behavior consistent with the requirements of the pharmacy profession and CCP faculty. It is the position of the faculty that anyone who uses, possesses, distributes, sells, or is under the influence of narcotics, dangerous drugs, or controlled substances, or who abuses alcohol or is involved in any conduct involving moral turpitude, fails to meet the ethical and moral requirements of the profession, and may be dismissed from the program or denied the awarding of the Pharm.D. degree from CCP.

## **LICENSURE REQUIREMENTS**

To practice in the United States, including Illinois, students must successfully complete an ACPE accredited Doctor of Pharmacy program. Students must also accrue a minimum number of practical training hours and pass two licensure examinations; one scientific examination (NAPLEX) and one jurisprudence examination (MPJE). For more information about licensure examinations contact: National Association of Boards of Pharmacy, 1600 Feehanville Drive, Mount Prospect, IL 60056, 847/391-4406, [www.nabp.net](http://www.nabp.net).

Midwestern University Chicago College of Pharmacy's Doctor of Pharmacy program meets the educational requirements for licensure to practice as a pharmacist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New

Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

*Special Note:* Licensure in the states of Arkansas and South Dakota requires an additional 240 hours of pharmacy practice experiences. Licensure in the state of Minnesota may require additional hours of traditional compounding and dispensing pharmacy practice experience.

Midwestern University Chicago College of Pharmacy has not made a determination that its Doctor of Pharmacy Program curriculum meets the territorial educational requirements for licensure or certification in the following territories: Puerto Rico and U.S. Virgin Islands. Students in this program receive a direct notification that Midwestern University has not made a determination if their program meets the requirements in the above listed territories.

## PHARM.D. CURRICULUM

*The College reserves the right to alter the curriculum as it deems appropriate.*

For students entering the Doctor of Pharmacy Program in Fall 2016 and up through Fall 2018.

### First Professional Year:

Total Quarter Credit Hours Required: 48.5

#### Fall Quarter

BIOCD	1554	Biochemistry I	2.5
CORED	1599B	Interprofessional Education I	1
PHYSD	1522	Human Physiology I	3.5
PPRAD	1510	Professional Development I	1
PPRAD	1521	Healthcare Systems	3
PSCID	1517	Physical Pharmacy and Dosage Form Design	3
PSCID	1518	Pharmaceutical Calculations	3
<b>Total</b>			<b>17</b>

#### Winter Quarter

BIOCD	1555	Biochemistry II	3.5
MICRD	1520	Introductory Immunology/Biologics	2
PHYSD	1523	Human Physiology II	3.5

CORED	1500B	Interprofessional Healthcare Communications	1
PPRAD	1525	Fundamentals of Pharmacy Practice	3
PSCID	1519	Dosage Form Laboratory	1
<b>Total</b>			<b>14</b>

#### Spring Quarter

PPRAD	1530	Introductory to Pharmacy Practice Experience (IPPE): Community	3.5
PPRAD	1532	Pharmacotherapeutics I	3
PPRAD	1533	Pharmacy Practice Development and Evaluation I	3
PPRAD	1543	Institutional Pharmacy Practice	2.5
PSCID	1531	Introduction to Biopharmaceutics and Pharmacokinetics	3.5
PSCID	1532	Introduction to Drug Structure Evaluation	2
<b>Total</b>			<b>17.5</b>

### Second Professional Year:

Total Quarter Credit Hours Required: 49-61.5

#### Fall Quarter

PHARD	1651	Pharmacology I	2.5
PPRAD	1610	Professional Development II	1
PPRAD	1650	IPPE II Health Systems (1/3 of the class)	3.5
PPRAD	1651	Introductory Pharmacy Practice Experience Longitudinal I	2
PPRAD	1661	Pharmacotherapeutics II	4.5
PPRAD	1671	Evidence-Based Pharmacy Practice	3
PSCID	1621	Chemical Principles of Drug Action I	3.5
		Electives	0-2
<b>Total</b>			<b>16.5-22</b>

#### Winter Quarter

CORED	1699B	Interprofessional Education II	1
MICRD	1622	Infectious Diseases & Their Etiologic Agents	3

PHARD	1652	Pharmacology II	1.5	<b>Total</b>		<b>13-17.5</b>
PPRAD	1650	IPPE II Health Systems (1/3 of the class)	3.5	<b>Winter Quarter</b>		
PPRAD	1652	IPPE Longitudinal II	1	PPRAD	1750	IPPE III Clinical (1/3 of the class) 3.5
PPRAD	1662	Pharmacotherapeutics III	5.5	PPRAD	1762	Pharmacotherapeutics VI 4
PSCID	1622	Chemical Principles of Drug Action II	2.5	PPRAD	1772	IPPE Clinical Skills & Simulation III 3
		Electives	0-3	PSCID	1762	Principles of Drug Action II 3.5
<b>Total</b>			<b>14.5-21</b>	PSCID	1772	Biotechnology 2.5
<b>Spring Quarter</b>						Electives 0-4
PHARD	1653	Pharmacology III	2	<b>Total</b>		<b>13-20.5</b>
PPRAD	1650	IPPE II Health Systems (1/3 of the class)	3.5	<b>Spring Quarter</b>		
PPRAD	1653	IPPE Longitudinal III	1.5	PPRAD	1714	Professional Development IV 1
PPRAD	1655	*IPPE Advanced Community I (*Class of 2022 only)	1.5	PPRAD	1754	*IPPE Advanced Community II 2 (*Class of 2021 only)
PPRAD	1663	Pharmacotherapeutics IV	4.5	PPRAD	1773	Pharmacy Law/Ethics 3
PPRAD	1670	IPPE Clinical Skills and Simulation I	3	PPRAD	1793	Clinical Pharmacokinetics 3
PPRAD	1750	IPPE III Clinical (1/3 of the class)	3.5			Advanced Pharmacy Practice Experience 0-9
PSCID	1623	Chemical Principles of Drug Action III	2	<b>Total</b>		<b>9-18</b>
		Electives	0-4	<b>Clinical Block Fourth Professional Year:</b>		
<b>Total</b>			<b>14.5-22</b>	Students will be registered for five of the six rotation blocks available.		
<b>Third Professional Year:</b>				Total Quarter Credit Hours Required		49-58
Students may be registered for one Advanced Pharmacy Practice Experience rotation block in Spring Quarter.				<b>Clinical Block Fourth Professional Year</b>		
Total Quarter Credit Hours Required:			35-52.5	PPRAD	1802	Community Advanced Pharmacy Practice Experience 9
<b>Fall Quarter</b>				PPRAD	1803	Hospital Advanced Pharmacy Practice Experience 9
PPRAD	1710	Professional Development III	1	PPRAD	1804	General Medicine Advanced Pharmacy Practice Experience 9
PPRAD	1741	Pharmacy Practice Development and Evaluation II	3	PPRAD	1805	Ambulatory Care Advanced Pharmacy Practice Experience 9
PPRAD	1750	IPPE III Clinical (1/3 of the class)	3.5	PPRAD	1806	Clinical Specialty Advanced Pharmacy Practice Experience 9
PPRAD	1761	Pharmacotherapeutics V	5	PPRAD	1807	Elective Advanced Pharmacy Practice Experience 9
PPRAD	1771	IPPE Clinical Skills & Simulation II	2	PPRAD	1810	PharmD Seminar 4
PSCID	1761	Principles of Drug Action I	2	<b>Total</b>		<b>49-58</b>
		Electives	1-3			

## PHARM.D. CURRICULUM (EFFECTIVE FALL 2019) STANDARD GRADUATION OPTION

*The College reserves the right to alter the curriculum as it deems appropriate.*

For students entering the Doctor of Pharmacy Program in or after Fall 2019.

### First Professional Year:

Total Quarter Credit Hours Required: 51

#### Fall Quarter

BIOCD	1554	Biochemistry I	2.5
CORED	1599B	Interprofessional Education I	1
PHYSD	1522	Human Physiology I	3.5
PPRAD	1510	Professional Development I	1
PPRAD	1521	Healthcare Systems	3
PSCID	1517	Physical Pharmacy and Dosage Form Design	3
PSCID	1518	Pharmaceutical Calculations	3
<b>Total</b>			<b>17</b>

#### Winter Quarter

BIOCD	1555	Biochemistry II	3.5
CORED	1500B	Interprofessional Healthcare Communications	1
MICRD	1520	Introductory Immunology/Biologics	2
PHYSD	1523	Human Physiology II	3.5
PPRAD	1525	Fundamentals of Pharmacy Practice	3
PSCID	1519	Dosage Form Laboratory	1
<b>Total</b>			<b>14</b>

#### Spring Quarter

PPRAD	1531	Introductory to Pharmacy Practice Experience (IPPE): Community	6
PPRAD	1532	Pharmacotherapeutics I	3
PPRAD	1533	Pharmacy Practice Development and Evaluation I	3
PPRAD	1543	Institutional Pharmacy Practice	2.5

PSCID	1531	Introduction to Biopharmaceutics and Pharmacokinetics	3.5
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PSCID	1532	Introduction to Drug Structure Evaluation	2
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**Total 20**

### Second Professional Year:

Total Quarter Credit Hours Required: 47.5-60

#### Fall Quarter

PHARD	1651	Pharmacology I	2.5
PPRAD	1610	Professional Development II	1
PPRAD	1656	IPPE Health Systems (1/2 of the class)	3
PPRAD	1661	Pharmacotherapeutics II	4.5
PPRAD	1671	Evidence-Based Pharmacy Practice	3
PPRAD	1681	Clinical Skills I	2
PSCID	1621	Chemical Principles of Drug Action I	3.5
		Electives	0-2

**Total 16.5-21.5**

#### Winter Quarter

CORED	1699B	Interprofessional Education II	1
MICRD	1622	Infectious Diseases & Their Etiologic Agents	3
PHARD	1652	Pharmacology II	1.5
PPRAD	1662	Pharmacotherapeutics III	5.5
PPRAD	1682	Clinical Skills II	2.5
PSCID	1622	Chemical Principles of Drug Action II	2.5
		Electives	0-3

**Total 16-19**

#### Spring Quarter

PHARD	1653	Pharmacology III	2
PPRAD	1656	IPPE Health Systems (1/2 of the class)	3
PPRAD	1663	Pharmacotherapeutics IV	4.5
PPRAD	1683	Clinical Skills III	2.5

PPRAD	1750	IPPE III Clinical (1/3 of the class)	3.5
PSCID	1623	Chemical Principles of Drug Action III	2
		Electives	1-4
<b>Total</b>			<b>12-18.5</b>

**Third Professional Year:**

Students may be registered for one Advanced Pharmacy Practice Experience rotation block in Spring Quarter.

Total Quarter Credit Hours Required: 32.5-51

**Fall Quarter**

PPRAD	1710	Professional Development III	1
PPRAD	1741	Pharmacy Practice Development and Evaluation II	3
PPRAD	1750	IPPE III Clinical (1/3 of the class)	3.5
PPRAD	1761	Pharmacotherapeutics V	5
PPRAD	1781	Clinical Skills IV	2.5
PSCID	1761	Principles of Drug Action I	2
		Electives	0-4
<b>Total</b>			<b>13.5-21</b>

**Winter Quarter**

PPRAD	1750	IPPE III Clinical (1/3 of the class)	3.5
PPRAD	1762	Pharmacotherapeutics VI	4
PSCID	1762	Principles of Drug Action II	3.5
PSCID	1772	Biotechnology	2.5
		Electives	2-4
<b>Total</b>			<b>12-17.5</b>

**Spring Quarter**

PPRAD	1714	Professional Development IV	1
PPRAD	1773	Pharmacy Law/Ethics	3
PPRAD	1793	Clinical Pharmacokinetics	3
		Advanced Pharmacy Practice Experience	0-9
<b>Total</b>			<b>7-16</b>

**Clinical Block Fourth Professional Year:**

Students will be registered for five of the six rotation blocks available.

Total Quarter Credit Hours Required 49-58

**Clinical Block Fourth Professional Year**

PPRAD	1802	Community Advanced Pharmacy Practice Experience	9
PPRAD	1803	Hospital Advanced Pharmacy Practice Experience	9
PPRAD	1804	General Medicine Advanced Pharmacy Practice Experience	9
PPRAD	1805	Ambulatory Care Advanced Pharmacy Practice Experience	9
PPRAD	1806	Clinical Specialty Advanced Pharmacy Practice Experience	9
PPRAD	1807	Elective Advanced Pharmacy Practice Experience	9
PPRAD	1810	PharmD Seminar	4
<b>Total</b>			<b>49-58</b>

**PHARM.D. CURRICULUM (EFFECTIVE FALL 2019) ACCELERATED GRADUATION OPTION**

*The College reserves the right to alter the curriculum as it deems appropriate.*

For students entering the Doctor of Pharmacy Program in or after Fall 2019.

**First Professional Year:**

Total Quarter Credit Hours Required: 57-60.5

**Fall Quarter**

BIOCD	1554	Biochemistry I	2.5
CORED	1599B	Interprofessional Education I	1
PHYSD	1522	Human Physiology I	3.5
PPRAD	1510	Professional Development I	1
PPRAD	1521	Healthcare Systems	3
PSCID	1517	Physical Pharmacy and Dosage Form Design	3
PSCID	1518	Pharmaceutical Calculations	3
<b>Total</b>			<b>17</b>

**Winter Quarter**

BIOCD	1555	Biochemistry II	3.5
CORED	1500B	Interprofessional Healthcare Communications	1

MICRD	1520	Introductory Immunology/Biologics	2
PHYSD	1523	Human Physiology II	3.5
PPRAD	1525	Fundamentals of Pharmacy Practice	3
PSCID	1519	Dosage Form Laboratory	1
<b>Total</b>			<b>14</b>

**Spring Quarter**

PPRAD	1532	Pharmacotherapeutics I	3
PPRAD	1533	Pharmacy Practice Development and Evaluation I	3
PPRAD	1543	Institutional Pharmacy Practice	2.5
PSCID	1531	Introduction to Biopharmaceutics and Pharmacokinetics	3.5
PSCID	1532	Introduction to Drug Structure Evaluation	2
		Electives	0-3.5
<b>Total</b>			<b>14-17.5</b>

**Summer Quarter**

PPRAD	1531	Introductory to Pharmacy Practice Experience (IPPE): Community	6
PPRAD	1656	IPPE Health Systems	3
PPRAD	1773	Pharmacy Law/Ethics	3
<b>Total</b>			<b>12</b>

**Second Professional Year:**

Total Quarter Credit Hours Required: 60-69

**Fall Quarter**

PHARD	1651	Pharmacology I	2.5
PPRAD	1610	Professional Development II	1
PPRAD	1661	Pharmacotherapeutics II	4.5
PPRAD	1671	Evidence-Based Pharmacy Practice	3
PPRAD	1681	Clinical Skills I	2
PSCID	1621	Chemical Principles of Drug Action I	3.5
		Electives	0-4
<b>Total</b>			<b>16.5-20.5</b>

**Winter Quarter**

CORED	1699B	Interprofessional Education II	1
MICRD	1622	Infectious Diseases & Their Etiologic Agents	3
PHARD	1652	Pharmacology II	1.5
PPRAD	1662	Pharmacotherapeutics III	5.5
PPRAD	1682	Clinical Skills II	2.5
PSCID	1622	Chemical Principles of Drug Action II	2.5
		Electives	0-3
<b>Total</b>			<b>16-19</b>

**Spring Quarter**

PHARD	1653	Pharmacology III	2
PPRAD	1663	Pharmacotherapeutics IV	4.5
PPRAD	1683	Clinical Skills III	2.5
PPRAD	1753	IPPE Clinical	3.5
PSCID	1623	Chemical Principles of Drug Action III	2
		Electives	0-2
<b>Total</b>			<b>14.5-16.5</b>

**Summer Quarter**

PPRAD	1762	Pharmacotherapeutics VI	4
PPRAD	1793	Clinical Pharmacokinetics	3
PSCID	1762	Principles of Drug Action II	3.5
PSCID	1772	Biotechnology	2.5
<b>Total</b>			<b>13</b>

**Third Professional Year:**

Total Quarter Credit Hours Required: 72.5-76.5

**Fall Quarter**

PPRAD	1710	Professional Development III	1
PPRAD	1714	Professional Development IV	1
PPRAD	1741	Pharmacy Practice Development and Evaluation II	3
PPRAD	1761	Pharmacotherapeutics V	5
PPRAD	1781	Clinical Skills IV	2.5
PSCID	1761	Principles of Drug Action I	2

	Electives	0-4
<b>Total</b>		<b>14.5-18.5</b>

### Clinical Block

PPRAD	1802	Community Advanced Pharmacy Practice Experience	9
PPRAD	1803	Hospital Advanced Pharmacy Practice Experience	9
PPRAD	1804	General Medicine Advanced Pharmacy Practice Experience	9
PPRAD	1805	Ambulatory Care Advanced Pharmacy Practice Experience	9
PPRAD	1806	Clinical Specialty Advanced Pharmacy Practice Experience	9
PPRAD	1807	Elective Advanced Pharmacy Practice Experience	9
PPRAD	1810	PharmD Seminar	4
<b>Total</b>			<b>58</b>

### Professional Electives

For students entering the Doctor of Pharmacy Program in or after 2016, during their study at CCP, they must complete a minimum total of 8 hours of elective credit.

#### Pharmacology

PHARD 1420	Medical Spanish	2
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#### Pharmacy Practice

PPRAD 1301	Special Project or Research	1-3
PPRAD 1302	Community Service	1
PPRAD 1303	Principles of Acute Medicine	2
PPRAD 1306	Introduction to Veterinary Pharmacy	2
PPRAD 1309	Pediatric Pharmacotherapy	2
PPRAD 1314	Women's Health	2
PPRAD 1315	Advanced Clinical Diabetes Management	2
PPRAD 1316	Advanced Infectious Diseases	2

PPRAD 1318	Introduction to American Sign Language for Health Professionals	1
PPRAD 1322	Tobacco Cessation	1
PPRAD 1324	Spirituality and Health	2
PPRAD 1327	Therapeutic Issues in Critical Care	2
PPRAD 1338	Epidemiologic Investigation of Medication Use	2
PPRAD 1339	Anticoagulation in Clinical Practice	2
PPRAD 1341	Advanced Cardiology	2
PPRAD 1342	Postgraduate Training Opportunities for Pharmacists	1
PPRAD 1344	Therapeutic Management of Poisoning and Drug Overdose	1
PPRAD 1345	Statistical Application in Pharmacy Research	2
PPRAD 1346	Entrepreneurship	1
PPRAD 1347	Clinical Trials in Ambulatory Care	2
PPRAD 1348	Health Promotion and Disease Prevention Across Cultures	1
PPRAD 1349	Patient-Centered Ambulatory Care and Practice Management	2
PPRAD 1350	Pharmacy and Therapeutics Competition	2
PPRAD 1351	Business Plan Competition	2

#### Pharmaceutical Sciences

PSCID 1301	Special Project or Research	1-3
PSCID 1302	Community Service	1
PSCID 1305	Pharmacy: Its History and Heroes	2



PSCID 1370	Pharmaceuticals and Personal Care Products in the Environment	1
PSCID 1375	Vitamins, Minerals, and Nutritional Support	2
PSCID 1376	Development of Newly Approved Drug Therapies	2
PSCID 1379	LGBTQI Considerations in the Provision of Healthcare	2
PSCID 1382	Advanced Compounding	2
PSCID 1383	Natural Products and Complementary & Integrative Health	3
PSCID 1384	Advanced Topics in Pharmacogenomics	2
PSCID 1385	Self-Management in the Face of Different	1

### Pharmacy Practice Experiences in the Pharm.D. Program

All students are required to be registered pharmacy technicians with student designation in the state of Illinois by the end of the first quarter of enrollment. This registration must be maintained for the entire enrollment period.

Students must be in full compliance with University requirements regarding student health insurance, criminal background checks, drug-free and substance abuse policies and immunizations prior to beginning any experiential course.

For students entering the Doctor of Pharmacy Program in or after 2016 to Fall 2018.

All students must successfully complete 15 credit hours of introductory pharmacy practice experiences (IPPEs) during the first, second, and third professional years. These must be completed in community, health systems, clinical, and longitudinal settings. Students must also successfully complete 8 credit hours of IPPE Clinical Skills and Simulation coursework.

In addition, students must complete six full-time (40 hours/week) advanced pharmacy practice experiences (APPEs) during their spring quarter of their third professional year and their fourth professional year. Each rotation is 6 weeks in length. APPEs include rotations in community advanced pharmacy, hospital advanced

pharmacy, ambulatory care, general medicine, clinical specialty and one elective. APPEs build on the foundation of IPPEs through completion of competency-based objectives and demonstration of proficiency in general pharmaceutical skills. Emphasis is placed on in-depth experience in the provision of patient-centered care in a variety of patient care settings. While most IPPEs and APPEs are scheduled during the day, there may be IPPEs and APPEs scheduled for weekends and evenings to provide maximum patient care and a maximum learning experience.

For students entering the Doctor of Pharmacy Program in or after 2019.

All students must successfully complete 12.5 credit hours of introductory pharmacy practice experiences (IPPEs) during the first, second or third professional years. These must be completed in community, health systems, and clinical.

Students must complete six full-time (40 hours/week) advanced pharmacy practice experiences (APPEs) during their third or fourth professional year. Each rotation is 6 weeks in length. APPEs include rotations in community advanced pharmacy practice, hospital advanced pharmacy, ambulatory care, general medicine, clinical specialty and one elective.

### Distant Advanced Pharmacy Practice Experiences

Distant Advanced Pharmacy Practice Experiences (APPEs) are defined as 6-week APPEs that are at practice sites outside the greater Chicago area. The greater Chicago area is defined as sites within Chicago and the surrounding counties of Cook, Will, DuPage, Kane, Lake, McHenry, Kendall, and Grundy, as well as parts of DeKalb and Winnebago County, Northwestern Indiana and Southeastern Wisconsin. Students in good academic and disciplinary standing as determined by the College may participate in distant APPEs. Distant APPEs are subject to final approval on an individual basis by the Director of the Office of Experiential Education (OEE). During their PS-II year students may apply to be considered for placement on distant APPEs. Students must attend all mandatory distant APPE meetings and adhere to all assignment deadline dates. All requests will be considered, but placement priority will occur in the following order:

- Students requesting distant APPEs in the same city as their permanent (family) address within the United States.
- Students requesting distant APPEs administered by the United States Public Health Services (e.g. Indian Health Services, Bureau of Prisons).
- Students requesting distant APPEs in cities within the United States where relatives will provide housing for the student.
- Students requesting a distant APPE in a state they may be moving to after graduation.

All distant APPE sites and preceptors must be approved by OEE, and an affiliation agreement must be executed prior to the student beginning the rotation. There is no guarantee that requested distant APPEs will be approved and scheduled. Schedule changes resulting from changes in a preceptor's availability may result in a denied distant APPE request. Students doing distant APPEs are also responsible for contacting the Board of Pharmacy in the state where they are placed to determine the licensure requirement(s) for students on rotations in that state. The student must comply with the requirements for that state and provide proof of compliance to OEE. All travel and living expenses are the student's responsibility.

## DEPARTMENTS

### **Department of Pharmaceutical Sciences**

The mission of the Department of Pharmaceutical Sciences is to educate students in the foundational scientific principles essential to the provision of exemplary patient-centered care. The Department is committed to life-long learning and the professional growth of students, faculty, and staff through engagement in innovative educational strategies, scholarly activities, and service to the academic and scientific communities, the profession of pharmacy, and society.

The Department of Pharmaceutical Sciences subsumes three specialty areas: pharmaceuticals, medicinal chemistry, and natural products/pharmacognosy.

Pharmaceuticals is that area of pharmacy associated with the following: designing various dosage forms for delivery of drugs; determining drug storage and stability; and evaluating the effects of administration and formulation factors on the absorption, distribution, metabolism, and excretion of drugs in humans.

Medicinal chemistry is a science that is unique to pharmacy because it is a hybridization of the physical, chemical, biochemical, analytical, and pharmacologic principles employed in explaining the mechanisms of drug action and drug design. The application of principles associated with medicinal chemistry provides the professional undergraduate student with a firm basis for his/her career in pharmacy.

Pharmacognosy is that pharmaceutical science concerned with the biological, chemical, and therapeutic uses of drugs obtained from plants, microbes, and animals.

### **Department of Pharmacy Practice**

The mission of the Department of Pharmacy Practice is to develop excellence in the profession through integration of didactic, experiential and postgraduate education. The Department seeks to inspire students, residents and faculty to be responsible patient advocates by promoting and engaging in patient-centered care, community service, scholarship and professional involvement.

The Department of Pharmacy Practice is composed of faculty who provide education in the administrative and clinical sciences, as well as direct practice experience. Required courses in the administrative science area include a survey of the health care system, professional practice management, quality assurance of pharmacy practice, and pharmacy law and ethics. Required courses in the clinical science area include drug literature evaluation, pharmacotherapeutics, clinical pharmacokinetics, and professional practice classes and laboratories that emphasize communication skills, prescription processing, and patient-centered care. Supervised introductory and advanced pharmacy practice experiences required during the program provide opportunities for students to apply knowledge acquired in didactic courses to life situations. The experiences are designed to promote the development of technical, cognitive, and decision-making skills that are necessary for the contemporary practice of pharmacy in a variety of practice environments. Various states apply these experiences to their state board of pharmacy internship requirements.

### **Office of Experiential Education**

The mission of the Office of Experiential Education is to provide students with rotation experiences in quality practice settings that offer positive, supportive, and challenging environments that will allow enhancement of the students' professional knowledge, skills, and socialization. These rotation experiences will prepare them to be caring and competent pharmacists that are able to provide collaborative and exceptional patient care, and contribute meaningfully to the profession.

### **Postgraduate Education**

The College offers a number of postgraduate training opportunities: Postgraduate Year Two (PGY-2) ambulatory care pharmacy residency program; PGY-2 infectious diseases pharmacy residency program; and an infectious diseases pharmacotherapy fellowship. In addition, the college is affiliated with one PGY-1 community pharmacy residency program. All College residency programs are fully accredited by the American Society of Health-System Pharmacists.

## PHARM. D. CURRICULUM CORE COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description it is implied that there is no prerequisite. This listing applies for students entering the Doctor of Pharmacy Program in or after Fall 2016.

### *BIOCD 1554 Biochemistry I*

This course emphasizes principles and concepts of structure-function relationships in major biomolecules and human metabolism. This course includes lectures and workshops which utilize small group discussions focusing on clinical case

studies to illustrate principles of clinical biochemistry and application to the practice of pharmacy.  
2.5 credits

*BIOCD 1555 Biochemistry II*

This course emphasizes human nutrition along with cell and molecular biology. This course includes lectures and workshops which utilize small group discussions focusing on clinical case studies to illustrate principles of clinical biochemistry and application to the practice of pharmacy.  
3.5 credits

*CORED 1500B Interprofessional Healthcare Communications*

This course will introduce first year pharmacy, medical, dental medicine and optometry students to the fundamental principles of effective communication in the healthcare setting. The course introduces the principles of interpersonal, nonverbal, motivational communication, cultural awareness, and selected barriers to effective communication.  
1 credit

*CORED 1599B Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease.  
1 credit

*CORED 1699B Interprofessional Education II*

This course provides students, working in interprofessional teams, opportunities to learn and provide integrated, patient-centered care in the development of therapeutic care plans using a team-based approach. Active learning techniques, interprofessional learning, and clinical simulation will be used to enhance the education of learners to effectively engage in problem solving and communication activities that address current health related issues in the care of humans, animals, and the environment.  
1 credit

Prerequisite: CORED 1599B Interprofessional Education I

*MICRD 1520 Introductory Immunology/Biologics*

This course presents basic aspects of the body's defense mechanisms. Current advances in immunotherapy and immunoprophylaxis are emphasized. The role the immune system plays in rejection of organ transplants, autoimmunity, and hypersensitivity are also discussed.  
2 credits

*MICRD 1622 Infectious Disease and Their Etiologic Agents*

This course is an integrated course that consists of didactic lectures, "bug quizzes", and homework based on on-line "self-study" assignments. A basic knowledge of the infectious agent and clinical microbiology is provided so that students can understand the infectious agents, relevant diseases, and the clinical signs and symptoms of those diseases based on the organ-system. Emphasis is placed on understanding the interaction between the host and pathogenic microorganisms.  
3 credits

*PHARD 1651, 1652, 1653 Pharmacology I, II, III*

This three-course sequence explores the pharmacologic actions of the major classes of drugs acting on the autonomic, cardiovascular, gastrointestinal, immune, endocrine, and central nervous systems. The major classes of drugs associated with the chemotherapy of microbial (bacteria, viral, fungal) and parasitic diseases are also described. Other topics discussed include, principles of antimicrobial therapy, drugs acting on blood and blood-forming organs, vitamins, as well as principles of toxicology, receptor theory, and dose response.  
PHARD 1651 Pharmacology I - 2.5 credits; PHARD 1652 Pharmacology II - 1.5 credits; PHARD 1653 Pharmacology III - 2 credits

*PHYSD 1522 Human Physiology I*

This course provides core knowledge of physiology in order to understand normal body function and to acquire the ability to analyze and interpret the immediate and long term compensatory responses to common disease states of excitable cells, cardiovascular, and nervous systems. Basic and applied terminology as well as the basic morphology of systems are discussed, and the relationship between anatomy and function of the systems considered is included.  
3.5 credits

*PHYSD 1523 Human Physiology II*

This course provides core knowledge of physiology required by students of pharmacy in order to understand normal function and to acquire the ability to analyze and interpret the immediate and long-term compensatory responses to common disease states of the respiratory, renal, acid-base, endocrine, and gastrointestinal systems. Basic and applied terminology as well as the basic morphology of systems are discussed, and the relationship between anatomy and function of the systems considered is included.  
3.5 credits

*PPRAD 1510, 1610, 1710, 1714 Professional Development I, II, III, IV*

This course sequence develops students' knowledge, skills, abilities, behaviors and attitudes necessary to demonstrate self-awareness, leadership, innovation and entrepreneurship,

and professionalism through their life-long career. Continuing professional development model (CPD) will be the framework for the course. Required and elective activities may be offered and students will record and reflect on these activities in their electronic portfolio.  
Each course 1 credit

*PPRAD 1521 Healthcare Systems*

This course describes elements and forces affecting the organization, delivery, and financing of healthcare services in the United States. It explores major historical, social, economic, and political aspects of our health care system. Strengths and weaknesses of the system, including possible options for mitigating the latter, are identified.  
3 credits

*PPRAD 1525 Fundamentals of Pharmacy Practice*

This course introduces the student to the practice of pharmacy through lectures and workshops and provides them with skills needed to participate in future Introductory Pharmacy Practice Experiences. Students learn basic principles of pharmacy practice necessary for any practice setting, including pharmacy law, informatic, prescription process, and the pharmacists' patient care process. Students will be expected to demonstrate patient interviewing and drug information skills.  
3 credits

*PPRAD 1531 Introductory to Pharmacy Practice Experience (IPPE): Community*

This experience provides an opportunity for students to participate in basic patient care and distribution services in a community practice setting. Students gain experience in community pharmacy practice including the areas of professional communication, drug information, patient counseling for prescription and OTC medications, medication distribution, extemporaneous products, and application of federal and state pharmacy laws.  
6 credits

*PPRAD 1532, 1661, 1662, 1663, 1761,*

*1762 Pharmacotherapeutics I, II, III, IV, V, VI*

Pharmacotherapeutics is a sequence of six courses emphasizing the safe, effective, and evidence-based use of drugs. The course sequence focuses on the pharmacists' patient care process through lectures with embedded individual and group learning activities.

PPRAD 1532 Pharmacotherapeutics I - 3 credits; PPRAD 1661 Pharmacotherapeutics II - 4.5 credits; PPRAD 1662 Pharmacotherapeutics III - 5.5 credits; PPRAD 1663 Pharmacotherapeutics IV - 4.5 credits; PPRAD 1761 Pharmacotherapeutics V - 5 credits; PPRAD 1762 Pharmacotherapeutics VI - 4 credits

*PPRAD 1533 Pharmacy Practice Development and Evaluation I*

This is the first course in a two-course series introducing students to concepts important for the development and evaluation of pharmacy practice activities. Students will be exposed to basic management principles relevant to pharmacy practice and will learn about the role of quality improvement in both health care and pharmacy practice. In addition to traditional lectures, students will participate in hands-on activities and group projects related to management and quality topics.

3 credits

Prerequisites: PPRAD 1521 Healthcare Systems and PPRAD 1525 Fundamentals of Pharmacy Practice

*PPRAD 1543 Institutional Pharmacy Practice*

This course will introduce students to the practice of pharmacy in institutional settings, focusing on hospitals and other acute care settings. The use, preparation, and regulations of parenteral medications will be described. In addition, students will learn about other issues surrounding the safe and effective use of medications in the institutional setting, including medication safety, accreditation and computerized physician order entry systems.

2.5 credits

*PPRAD 1656 Introductory Pharmacy Practice Experience: Health Systems*

This course will provide students an opportunity to participate in basic patient care and distribution services in a health system setting. Students will gain practical experience in health systems including the areas of professional and patient communication, drug information, medication distribution systems, sterile product preparation, interprofessional activities, and application of federal and state pharmacy laws.

3 credits

*PPRAD 1651, 1652, 1653 IPPE Longitudinal I, II, III*

A three course sequence designed to provide students opportunities to communicate, deliver patient care, and develop drug information skills. Emphasis will be placed on the changing needs of patients and ensuring continuity of care. These courses will not only provide students opportunities to apply didactic knowledge to patients, but will also cultivate their affective attributes necessary to becoming a caring pharmacist.

PPRAD 1651 IPPE Longitudinal I - 2 credits; PPRAD 1652 IPPE Longitudinal II - 1 credit; PPRAD 1653 IPPE Longitudinal III - 1.5 credits

*PPRAD 1670, 1771, 1772 IPPE Clinical Skills & Simulation I, II, III*

In this course sequence, students will integrate and apply knowledge and skills obtained throughout the curriculum to the practice of pharmacy. These courses develop skills in communication and in identifying and assessing drug therapy problems using principles of patient assessment, physical assessment, and knowledge of drug therapy and devices. Students will demonstrate these skills and apply drug therapy problem-solving strategies to the pharmacists' patient care process.

PPRAD 1670 IPPE Clinical Skills & Simulation I - 3 credits;  
PPRAD 1771 IPPE Clinical Skills & Simulation II - 2 credits;  
PPRAD 1772 IPPE Clinical Skills & Simulation III - 3 credits

*PPRAD 1671 Evidence-Based Pharmacy Practice*

This course introduces students to the knowledge and skills necessary to construct sound pharmacotherapeutic recommendations via thorough retrieval and evaluation of best available clinical evidence. The course will focus on developing primary literature evaluation and critical thinking skills, so that students can use evidence to formulate drug information responses and patient care recommendations. Individual and group activities will include literature searching, literature evaluation, problem solving skills, and practice of verbal and written communication skills.

3 credits

*PPRAD 1681, 1682, 1683, 1781 Clinical Skills I, II, III, IV*

In this course sequence, students will integrate and apply knowledge and skills obtained throughout the curriculum to the practice of pharmacy. These courses develop skills in communication and in identifying and assessing drug therapy problems using principles of patient assessment, physical assessment, and knowledge of drug therapy and devices. Students will demonstrate these skills and apply drug therapy problem-solving strategies to the pharmacists' patient care process.

PPRAD 1681 Clinical Skills I - 2 credits; PPRAD 1682 Clinical Skills II - 2.5 credits; PPRAD 1683 Clinical Skills III - 2.5 credits; PPRAD 1781 Clinical Skills IV - 2.5 credits  
Prerequisite: for PPRAD 1781 Clinical Skills IV, 2.5 credits:  
Concurrent enrollment in PPRAD 1761 Pharmacotherapeutics V

*PPRAD 1741 Pharmacy Practice Development and Evaluation II*

This second course of a two-course series continues the introduction of students to concepts important for the development and evaluation of pharmacy practice activities. Students will learn basic skills necessary to evaluate programs and services. These skills will build on earlier principles related to evaluation of drug therapy outcomes at the patient

level by translating that thinking to economic, clinical, and humanistic outcomes at the population level. Various evaluation and outcome frameworks will be introduced.  
3 credits

*PPRAD 1753 Introductory Pharmacy Practice Experience: Clinical*

This course allows students to practice clinical skills in pharmacy through practical experiences, practice simulations, and workshops. Site visits to various clinical environments allow the student to experience and apply lessons learned from didactic courses in patient care settings.

3.5 credits

Prerequisite: PPRAD 1656 Introductory Pharmacy Practice Experience: Health Systems, PPRAD 1671 Evidence-Based Pharmacy Practice

*PPRAD 1773 Pharmacy Law/Ethics*

This course examines laws and ethical concepts controlling and guiding the practice of pharmacy in Illinois and the United States. Detailed analyses will be made of the following regulations and associated rules: Illinois Pharmacy Practice Act; Illinois Controlled Substances Act; Federal Controlled Substances Act; and Federal Food, Drug and Cosmetic Act. Additional state and federal laws affecting pharmacy practice will be considered as appropriate. Case law and scenarios will be used to facilitate student learning.

3 credits

*PPRAD 1793 Clinical Pharmacokinetics*

This course focuses on the application of pharmacokinetic principles for the purpose of optimizing drug therapy. Lectures and workshops are used to learn the following principles: effects of disease and drug-drug interactions on pharmacokinetic parameters, initial loading and maintenance dosage regimen calculations, dosage adjustment for linear and nonlinear drugs, interplay between pharmacokinetics and pharmacodynamics, effects of extracorporeal elimination, and interpretation of serum drug concentrations.

3 credits

*PPRAD 1802 Community Advanced Pharmacy Practice Experience*

This practice experience will enable students to develop their skills and gain experience in a variety of patient-oriented services in community practice. In addition to medication dispensing, students will focus on drug therapy assessment and intervention, identification, resolution, and prevention of drug-related problems, education, and communication with patients and other healthcare professionals. Students may participate in additional services such as administration of immunizations, blood pressure screenings, and medication therapy and disease state management.

9 credits

*PPRAD 1803 Hospital Advanced Pharmacy Practice Experience*

This practice experience will enable students to develop their skills and gain experience in hospital practice or other system of integrated pharmacy services. Emphasis is placed on systems to promote safe and effective medication use to optimize patient outcomes. In addition to medication order processing, preparation, and distribution, students will focus on drug-use decision-making processes, individual patient drug therapy monitoring, formulary management, and communication with patients and other healthcare professionals.

9 credits

*PPRAD 1804 General Medicine Advanced Pharmacy Practice Experience*

This practice experience will enable students to develop their skills and gain experience related to general medicine in an acute care setting. Emphasis is placed on participating in an interprofessional healthcare team, drug therapy assessment, patient care activities, and monitoring of outcomes in various patient populations. In addition, students will participate in drug therapy interventions, identify drug related problems, develop therapeutic care plans, and effectively communicate with patients and other healthcare professionals.

9 credits

*PPRAD 1805 Ambulatory Care Advanced Pharmacy Practice Experience*

This practice experience will enable students to develop their skills and gain experience related to ambulatory care practice. Emphasis will be placed on participating in an interprofessional healthcare team, and sharing responsibility with patients, caregivers, and other healthcare professionals to achieve optimal drug therapy outcomes. In addition, students will participate in drug therapy assessment and intervention, identify drug related problems, develop therapeutic care plans, and effectively communicate with patients and other healthcare professionals.

9 credits

*PPRAD 1806 Clinical Specialty Advanced Pharmacy Practice Experience*

This practice experience will enable students to develop their skills and gain experience related to practice in a specific clinical specialty. Emphasis will be placed on participating in an interprofessional healthcare team, drug therapy assessment and intervention, patient care activities, and monitoring of outcomes in various patient populations. In addition, students will participate in drug therapy interventions, identify drug related problems, develop therapeutic care plans, and effectively communicate with patients and other healthcare professionals.

9 credits

*PPRAD 1807 Elective Advanced Pharmacy Practice Experience*

This is an experience where students will gain an adequate breadth of knowledge, skills, and experiences specific to their chosen elective area. Pharmacy students may select from a list of electives with a variety of patient-care or non-patient care experiences such as an additional clinical specialty (when available), managed care pharmacy, academia, or pharmacy administration.

9 credits

*PPRAD 1810 PharmD Seminar*

This course provides the student an opportunity to review pharmacy-related concepts and clinical reasoning skills to prepare them to be successful, competent pharmacists that are able to contribute meaningfully to the profession. Topics covered will systematically address the NAPLEX® Competency Statements: Ensure Safe and Effective Pharmacotherapy and Health Outcomes; Safe and Accurate Preparation, Compounding, Dispensing, and Administration of Medications and Provision of Health Care Products.

4 credits

*PSCID 1517 Physical Pharmacy and Dosage Form Design*

This course is designed to impart an understanding of the types and characteristics of pharmaceutical dosage forms, and the physico-chemical principles involved in design, development, formulation, preparation, and dispensing of dosage forms.

3 credits

*PSCID 1518 Pharmaceutical Calculations*

This course provides an introduction to the practice of pharmacy with an emphasis on commonly encountered mathematical calculations that are essential to compounding and dispensing medications in subsequent pharmacy courses and a variety of pharmacy practice settings.

3 credits

*PSCID 1519 Dosage Form Laboratory*

This course is focused on discussing and learning to prepare various extemporaneously compounded dosage forms, while understanding and fulfilling all legal requirements.

1 credit

*PSCID 1531 Introduction to Biopharmaceutics and Pharmacokinetics*

This course will discuss biopharmaceutics and pharmacokinetic parameters. Topics covered include but are not limited to: mathematical descriptions of time course of drug absorption, distribution, and elimination; physicochemical properties of drugs and relevant physiologic factors that affect drug absorption, distribution, metabolism, and excretion; relationship between drug concentration and

clinical responses; pharmacokinetic variability caused by differences in body weight, age, sex, genetic factors, diseases, and drug interactions; and applications of pharmacokinetics and pharmaceutics to clinical situations.

3.5 credits

*PSCID 1532 Introduction to Drug Structure Evaluation*

This course provides a review of organic functional groups found in drug molecules and their properties. Heterocycles and amino acids are introduced as structural components of endogenous biomolecules and/or biological targets for drug action. As part of the drug structure evaluation process the acid/base properties, binding interactions possible with a biological target, and metabolic transformations for each functional group are presented. Significant emphasis will be placed on functional group interaction with amino acid side chains.

2 credits

*PSCID 1621, 1622, 1623 Chemical Principles of Drug Action I, II, III*

Concepts of drug-target interactions and structure-activity relationships are discussed for major drug classes. Classification is based on a drug's mechanism of action at its biological target. Routes of drug metabolism, drug transport and the predication of drug-drug, drug-disease and drug-food interactions based on chemical properties are presented. Examples of drug action in the cardiovascular, endocrine, central nervous, and immune systems and anti-infective agents will be discussed, as well as the impact of pharmacogenomics.

PSCID 1621 Chemical Principles of Drug Action I - 3.5 credits; PSCID 1622 Chemical Principles of Drug Action II - 2.5 credits; PSCID 1623 Chemical Principles of Drug Action III - 2 credits

*PSCID 1761, 1762 Principles of Drug Action I, II*

The pharmacology and medicinal chemistry of major drug classes used in the treatment of various disorders are explored. Mechanisms by which drugs mediate their pharmacological effects are discussed with consideration of drug-target interactions, structure-activity relationships, side effects and related toxicities. Drug metabolism, transport, drug resistance and the prediction of drug-drug, drug-disease and drug-food interactions based on chemical properties, and the impact of pharmacogenomics are presented.

PSCID 1761 Principles of Drug Action I - 2 credits; PSCID 1762 Principles of Drug Action II - 3.5 credits

*PSCID 1772 Biotechnology*

Biotechnology-derived products are increasingly being used to treat a variety of medical conditions. This course is an introduction to biotech products, and will cover general principles, production methods, regulatory issues, stem cell

and nucleic acid therapeutics, pharmacogenomics and gene testing. Delivery, storage and handling, and therapeutic use, monitoring and adverse effects of biologics (including hormones, enzymes, growth factors and monoclonal antibodies) will be addressed.

2.5 credits

## ELECTIVE COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

*PHARD 1420 Medical Spanish*

This elective will provide the student with the vocabulary necessary to understand and converse in the fields of medicine and health care in Spanish. It will focus on communication with a Spanish-speaking patient, as well as understanding cultural attitudes that may impact medical care. Listening, comprehension, and conversational skills will be stressed through dialogues and oral presentations. Students will develop cooperative learning and effective group dynamic skills necessary to accomplish course goals.

2 credits

Prerequisites: Students must pass a prerequisite oral and written basic Spanish language evaluation prior to course registration. Two years of high school or college Spanish.

*PPRAD 1301 Special Project or Research*

This course provides an opportunity for PS-I, PS-II, and PS-III students to work with individual faculty mentors on projects of variable scope. Included activities could be library, laboratory, and/or survey-type research; assistance with syllabus development of future elective courses; or other activities agreed on between the student and mentor and approved by the appropriate department chair. A maximum of 4 credits of PPRAD or PSCID 1301 may be applied toward elective requirements for the Pharm.D. degree.

1-3 credits

*PPRAD 1302 Community Service*

Through hands-on involvement in a community service project and discussions with community leaders, the student will be better prepared to provide pharmaceutical care to a wider segment of the population. The issues addressed may include understanding the role of physical or mental disabilities, cultural sensitivity, language barriers, and alternative medicines in providing quality pharmaceutical care. This course includes development and implementation of a service project or participation in a project currently sponsored by the University. Permission of the instructor is required.

1 credit

*PPRAD 1303 Principles of Acute Care*

The course emphasizes the skills and knowledge necessary to perform well in an acute care general medicine setting. The student will practice problem based learning in a team learning environment to devise appropriate therapeutic plans for disease states and clinical controversies commonly encountered in acute care practice. Instructors will utilize patient cases and interactive teaching methods.

2 credits

*PPRAD 1306 Introduction to Veterinary Pharmacy*

This course introduces students to issues associated with the provision of veterinary-focused pharmacy services. It provides a foundation for pharmacists interested in providing care for species other than humans. Pharmacology, unique physiologic and pharmacokinetic differences will be emphasized. Management and prevention of common diseases will be discussed.

2 credits

*PPRAD 1309 Pediatric Pharmacotherapy*

This course focuses on issues related to the treatment and care of pediatric patients. By following mock patients from birth through their adolescence, the elective is designed to introduce the students to common illnesses, drug delivery systems used for pediatric patients, and current controversies in pediatric care. Students have the opportunity to select topics of intent that will be covered in a portion of the course.

2 credits

*PPRAD 1314 Women's Health*

This elective concentrates on specific issues related to the optimal delivery of women's health care. Topics covered include sex related differences in treating women, wellness and prevention over the female life span, diseases uniquely affecting women, and pharmacotherapy and psychosocial aspects of women's health. Interactive lectures, group projects, and workshops will educate students about practical considerations in the health care of women. Community service will be encouraged.

2 credits

*PPRAD 1315 Advanced Clinical Diabetes Management*

This course will focus on advanced topics in the management of diabetes. Students will have the opportunity to practice application of the material through patient cases and hands-on experiences. Topics discussed will include a review of the classifications and diagnosis of diabetes, non-insulin and insulin therapies, cardiovascular outcomes trials and updates in primary literature, complications of diabetes, and a review of the devices available in the management of diabetes.

2 credits

*PPRAD 1316 Advanced Infectious Disease*

This course expands students' knowledge and skills in area of infectious diseases and antimicrobial pharmacotherapy. A case-based approach will be utilized to foster an interactive learning experience. Students will build upon their current knowledge of infectious diseases and antimicrobials through case-related discussions and debates utilizing current guidelines, evidence-based primary literature, institutional policies and procedures, and expert opinions from guest facilitators.

2 credits

*PPRAD 1318 Introduction to American Sign Language for Health Professionals*

Students develop syntactic knowledge of American Sign Language and learn basic vocabulary and conversation skills that are frequently used by health care professionals. Students will also develop expressive and receptive finger spelling through class activities. Aspects of deaf culture and methods of effective communication also discussed.

1 credit

*PPRAD 1322 Tobacco Cessation*

This course will enable students to gain the knowledge and skills necessary to provide comprehensive tobacco cessation counseling to patients who use tobacco. Topics of emphasis include epidemiology of tobacco use, principles of addiction, methods of assisting patients with quitting, and available tobacco cessation products.

1 credit

*PPRAD 1324 Spirituality and Health*

Students enhance their patient care skills by examining the relationship between spirituality and health, learn the role of spirituality and religion in health care, and examine issues related to the interaction between spiritual outlook and compliance with medical treatment. Faculty and expert guest presenters lead discussions on how belief systems affect patients' perception of health, necessary spiritual considerations in patient care, therapeutic dilemmas produced by spiritual beliefs, and resources available to the health care team.

2 credits

*PPRAD 1327 Therapeutic Issues in Critical Care*

In the critical care setting, pharmacists have a unique role on multidisciplinary medical teams through their expertise in pharmacotherapeutics, pharmacokinetics, and drug information. This course introduces students to select disease states encountered in the intensive care unit setting as well as current controversies regarding the clinical management of these patients. The therapeutic management of critically ill patients will be discussed using case study, interactive



methods and lecture formats.  
2 credits

*PPRAD 1338 Epidemiologic Investigation of Medication Use*

Epidemiologic methods are increasingly used for questions not easily found answered through traditional clinical research pathways (e.g., randomized trials). Given health care's emphasis on evidence-based practice and population-based care, a firm understanding of epidemiologic principles is necessary for health care professionals. This course will introduce students to the population-oriented approach of epidemiology and its application to examining the use and effects of medications, as well as practice evaluation.  
2 credits

*PPRAD 1339 Anticoagulation in Clinical Practice*

This course will explore anticoagulation in both the inpatient and outpatient settings through lecture, patient cases, and hands-on experiences. Students will develop a working knowledge and skill set required to provide pharmacy-managed anticoagulation services. Topics will include a review of currently available oral and parenteral anticoagulants as well as those in the pipeline, consideration in anticoagulation for special populations, and advanced therapeutic issues.  
2 credits

*PPRAD 1341 Advanced Cardiology*

This course reviews cardiovascular diseases for those students interested in cardiology. New topics (e.g. valvular disease) will be introduced, and previous topics discussed in required courses will be further augmented. Topics will focus on diagnostics and procedures, cardiovascular pharmacotherapy, and the role of the cardiology pharmacist. Active learning strategies and high-fidelity simulations are highly employed.  
2 credits

*PPRAD 1342 Postgraduate Training Opportunities for Pharmacists*

The course reviews pharmacists' postgraduate training and educational opportunities with a focus on pharmacy residencies. Topics include, but are not limited to, the residency application process, types of available residencies and fellowships, and careers available after postgraduate training. Students will also be expected to create a high quality curriculum vitae (CV) and letter of intent, which are standard components of most residency and fellowship application packages.  
1 credit

*PPRAD 1344 Therapeutic Management of Poisoning and Drug Overdose*

Pharmacists can provide an important role in the treatment of drug overdose. The purpose of this course is to introduce students to the clinical presentation and therapeutic management of various acute overdose situations, as well as the screening of high risk individuals for opioid abuse. This elective will cover basic principles of poison control and address the management of the following overdose types: opioids, illicit drugs, stimulants, alcohols, cardiovascular agents, anticholinergics, and others. The course will be lecture base with active learning opportunities.  
1 credit

*PPRAD 1345 Statistical Applications in Pharmacy Research*

This course will help students develop the skills necessary to analyze data, interpret the results of those analyses, and produce meaningful reports based on those analyses. Statistical techniques related to describing and visualizing data, comparing means, nonparametric tests, categorical data analysis, and regression modeling procedures will be presented in the course. Students will also be introduced to basic principles of data management, such as data file preparation, data manipulation, and recoding.  
2 credits

*PPRAD 1346 Entrepreneurship*

This course is designed to cultivate the entrepreneurial spirit. Students will engage in team building exercises, interactive lectures, and in-class activities to develop creative thinking. Working in groups, students will develop a business idea, abbreviated business plan, and present business plans to a panel of experts, who will evaluate the viability of the idea.  
1 credit

*PPRAD 1347 Clinical Trials in Ambulatory Care*

This course focuses on reviewing the clinical trial data that support therapeutic recommendations in ambulatory care. Students in this course critically evaluate clinical trials to reinforce skills in interpreting clinical trial data, practice applying the data to patient cases to support therapeutic recommendations, and identifying the rationale for current therapeutic guidelines.  
2 credits

*PPRAD 1348 Health Promotion and Disease Prevention Across Cultures*

This course is focused on health promotion and disease prevention in ethnic minority groups. The goal of the course is to augment concepts taught in the curriculum with an emphasis on developing critical thinking skills in the setting of a health screening event in the community. Active learning techniques will be used during class time to improve students' knowledge, skills, and self-confidence when: (1)

performing cardiometabolic screenings (e.g. cholesterol, blood glucose, and blood pressure) and (2) providing cross-cultural communication with patients' from different backgrounds.

1 credit

*PPRAD 1349 Patient-Centered Ambulatory Care and Practice Management*

This course focuses on the evolving role of pharmacist providing patient-centered ambulatory care services. Strong emphasis is placed on patient-centered care and practice management. Topics discussed include methods to build meaningful patient relationships; the importance of shared-decision making; evaluating risk assessment tools; career planning; billing opportunities and billing requirements; quality measurements; and strategic planning. Focused updates in drug therapy relevant to ambulatory care since therapeutics will also be introduced.

2 credits

*PPRAD 1350 Pharmacy and Therapeutics Competition*

This course is offered in conjunction with the annual AMCP Foundation Pharmacy and Therapeutics Competition. Using the AMCP formulary dossier format and a drug selected annually by AMCP, students prepare a drug monograph, develop an economic model and make a formulary recommendation for this designated drug for a simulated health plan. Students work in teams of four and present their recommendations to a judging panel. The top scoring team progress to the national competition.

2 credits

*PPRAD 1351 Business Plan Competition*

This course will guide students in creating the blueprint necessary for buying an existing independent community pharmacy or developing a new pharmacy or pharmacy service. The top scoring business plan may be submitted to a state or national competition.

2 credits

*PSCID 1301 Special Projects or Research*

This course provides an opportunity for PS-I, PS-II, and PS-III students to work with individual faculty mentors on projects of variable scope. Included activities could be library, laboratory, and/or survey-type research; assistance with syllabus development of future elective courses; or other activities agreed on between the student and mentor and approved by the appropriate department chair. A maximum of 4 credits of PPRAD or PSCID 1301 may be applied toward elective requirements for the Pharm.D. degree.

1-3 credits

*PSCID 1302 Community Service*

Through hands-on involvement in a community service project and discussions with community leaders, the student will be better prepared to provide pharmaceutical care to a wider segment of the population. The issues addressed may include understanding the role of physical or mental disabilities, cultural sensitivity, language barriers, and alternative medicines in providing quality pharmaceutical care. This course includes development and implementation of a service project or participation in a project currently sponsored by the University. Permission of the instructor is required.

1 credit

*PSCID 1305 Pharmacy: Its History and Heroes*

This course begins with a general overview of pharmacy throughout history, with special emphasis placed on Illinois pharmacy and pharmacy associations. The course will end with student-led presentations on individuals who can be considered heroes in the profession and who have been instrumental in the adaptation of our health care system to provide access to quality health care.

2 credits

*PSCID 1370 Pharmaceuticals and Personal Care Products in the Environment*

This course provides an understanding as to what can happen to the environment (personal and wildlife) in the presence of chemicals associated with pharmaceuticals and personal care products (PPCPs). This course focuses on identification of PPCP sources and entry points, removal strategies, as well as documented and potential cause/effect relationships between specific chemical products/byproducts and wildlife species. When relevant, potential cause/effect relationships between these chemical entities and human systems (e.g. reproductive system) will be explored.

1 credit

*PSCID 1375 Vitamins, Minerals, and Nutritional Support*

This course provides an overview of the mechanisms and therapeutic uses of fat- and water-soluble vitamins, antioxidants, macro- and micro-minerals, and enteral nutritional support products. Topics include the use of antioxidants, multi-vitamin choices, potential toxicity and drug interactions, as well as nutritional support/supplement selection for infants and adults. The mechanism-based approach used in this module allows the student pharmacist to more easily identify, organize, and recommend various therapeutic agents for a wide variety of patients.

2 credits

*PSCID 1376 Development of Newly Approved Drug Therapies*

The Food and Drug Administration is constantly engaged in evaluating new drug treatments and approving them for marketing in the US. Annually, the FDA approves about 20 new drug therapies. The process involved in the development of newly approved drug therapies for certain clinical conditions and diseases will be discussed. The business aspects of developing new drug therapies and the impact of pharmaceutical innovations on society and the business community will also be covered.

2 credits

*PSCID 1379 LGBTQI Considerations in the Provision of Healthcare*

This course develops knowledge and skills to facilitate the provision of inclusive, compassionate and holistic patient centered care to members of the Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex (LGBTQI) community. Lecture topics include an introduction to LGBTQI terminology, culture and history, mental health and social service needs, and communication strategies. An emphasis on personal acknowledgement of knowledge/skills deficits may help to prevent health inequities for these populations in the future.

2 credits

*PSCID 1382 Advanced Compounding*

This laboratory-based course will expose students to more advanced compounding techniques, formulation/dosage forms, and equipment. Lecture topics will include compounding safety, legislation, accreditation, marketing, and sources of compounding information and supplies

2 credits

*PSCID 1383 Natural Products and Complementary & Integrative Health*

Botanical dietary supplements are used by at least 1/3 of the population as a component of complementary and integrative health with mainstream medical practice. Health care professionals should develop knowledge and skills necessary to aid patients in making rational decisions about their use. This elective focuses on the utility of drugs from natural sources in practice today, and surveys the products of plants and animals, and various complementary modalities of medicine that impact health.

3 credits

*PSCID 1384 Advanced Topics in Pharmacogenomics*

This advanced topics course will provide an in-depth knowledge on the clinical application of pharmacogenomics. Students will deepen their understanding of how genetic differences impact drug therapy and be able to interpret pharmacogenomic data and testing results. Students are

expected to read assigned papers before class and participate in class activities and group discussions. Assessment will be based on student presentations, in class activities, case studies, short papers, and take home worksheets.

2 credits

*PSCID 1385 Self-Management in the Face of Different*

The elective focuses on self-management during communication with patients diagnosed with disease states that limit their physical or mental abilities (e.g., stroke, paraplegia, quadriplegia, autism, physical deformity, learning disabilities). Implicit bias evaluation, as well as skill set development to facilitate self-management (compassion and empathy) will be emphasized. Expert panel presentations, mini-lectures and in-class activities. Student acknowledgement of personal deficits and bias may help to prevent healthcare inequities for these populations in the future.

1 credit

## STUDENT ACADEMIC POLICIES

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### Early Monitoring of Students in Academic Difficulty

Faculty contact students who have earned a failing grade in required courses after approximately the third or fourth week of the quarter, based on course assessments to date, and offer to meet with them to discuss strategies for success. The Dean's Office also contacts those students, meets with them, and reviews strategies for success and available resources.

### Student Promotion and Graduation Committee

The Student Promotion and Graduation Committee (SPGC) is composed of the Associate Dean and members of the College faculty. It is responsible for enforcing the published academic and professional standards established by the faculty and for assuring that they are met by all students enrolled in each program. As such, this Committee establishes the criteria and policies and procedures for student advancement and graduation, as well as academic probation, dismissal, and readmission. This Committee meets at a minimum at the end of each academic quarter to review the academic progress and performance of students enrolled in the programs in relation to institutional academic policies. At

the end of the academic year, the Committee assesses the academic and professional progress and performance of each student. If the student's progress is satisfactory, the student is promoted to the next academic year, provided all tuition and fees have been paid. Finally, the Committee also identifies and recommends to the MWU Faculty Senate candidates for graduation.

If a student fails to make satisfactory progress in completing the prescribed course of study, the Committee shall take appropriate action to correct the deficiency(ies). In instances involving repeated failures of a student to maintain satisfactory academic/professional progress, the Committee may recommend dismissal.

Among the options available to the Committee in regard to unsatisfactory student performance are:

1. That a written caution be provided to the student.
2. That the student:
  - be placed on academic probation for a specified period of time;
  - take an alternate approved course offered at another college or university;
  - repeat the course(s) in which there is a failure when the course is offered again in the curriculum;
  - be placed in an extended program; or
  - be dismissed from the College.

### Student Graduation and Promotion Committee Guidelines

#### Standard Graduation Option

	<i>Usual Action*</i>	<i>Academic Status</i>	<i>Retake Course</i>	<i>Action Following Retake</i>
All courses passed	Promote	Good Standing	n/a	n/a
Annual GPA < 2.00	Place on Academic Probation	Probation	n/a	n/a
1 course failure equivalent** within any quarter	Retake course	Probation	Summer or Next Academic Year	Pass: Promote Fail: Dismiss
2 course failure equivalents** within any quarter	Placed on Extended Program	Probation	Next Academic Year	Pass: Promote Fail: Dismiss
3 course failure equivalents within 1 academic year, or 4 course failure equivalents overall **	Recommend dismissal from program			

\*Usual Action for students not currently or previously on academic probation

\*\*Course failure equivalent = Failure or Withdrawal Failure Grade for a course

#### Accelerated Graduation Option

	<i>Usual Action*</i>	<i>Academic Status</i>	<i>Retake Course</i>	<i>Action Following Retake</i>
<b>PS-1 Year</b>				
All courses passed	Promote	Good Standing	n/a	n/a
Annual GPA < 2.00	Place on Academic Probation	Probation	n/a	n/a
1 course failure equivalent** of one <u>F</u> all quarter course	Student switches to SGO curriculum	Probation	Summer	Pass: Promote Fail: Dismiss
1 course failure equivalent** of one <u>W</u> inter quarter course	Student switches to SGO curriculum	Probation	Summer along with IPPE-Community	Pass: Promote Fail: Dismiss
1 course failure equivalent** of one <u>S</u> pring quarter course	Student switches to SGO curriculum	Probation	Next Academic Year	Pass: Promote Fail: Dismiss
2 course failure equivalents** in any quarter	Placed on Extended Program	Probation	Next Academic Year	Pass: Promote Fail: Dismiss
3 course failure equivalents within 1 academic year, or 4 courses failure equivalents overall **	Recommend dismissal from program			

<b>PS-2 Year</b>				
All courses passed	Promote	Good Standing	n/a	n/a
Annual GPA < 2.00	Place on Academic Probation	Probation	n/a	n/a
1 course failure equivalent in any quarter**	Student switches to SGO curriculum	Probation	Determined by SPGC	Pass: Promote Fail: Dismiss
2 course failure equivalents** in any quarter	Placed on Extended Program	Probation	Determined by SPGC	Pass: Promote Fail: Dismiss
3 course failure equivalents within 1 academic year, or 4 courses failure equivalents overall **	Recommend dismissal from program			
<b>PS-3 Year</b>				
All courses passed	Promote			
Annual GPA < 2.00	Placed on academic probation			
Any course failure equivalent(s)** in any quarter	Required remediation determined by SPGC			
3 course failure equivalents within 1 academic year, or 4 courses failure equivalents overall **	Recommend dismissal from program			

\*Usual Action for students not currently or previously on academic probation

\*\*Course failure equivalent = Failure or Withdrawal Failure Grade for a course

### Academic Standards for the Pharm.D. Program

An annual didactic grade point average will be used as the central measure of academic performance. It is calculated from all didactic courses and IPPE courses for a particular professional year. Grades earned in courses taken prior to matriculation in the professional program, grades earned for courses taken at another institution while enrolled in the professional program, and grades earned for courses taken at the College in a more advanced professional year than that in which the student is enrolled, are not included in the calculation of this annual grade point average.

Students must maintain an annual grade point average of 2.000 in their professional program to remain in good academic standing. If a student's annual grade point average drops below 2.000 at the end of any quarter during the academic year, or the student earns a grade of "F" in one or more courses, the student is notified in writing that he/she is being placed on academic probation for the next academic quarter. Probation represents notice that continued inadequate academic performance may result in dismissal from the program and the College.

If the student has an annual grade point average less than 2.000 at the end of an academic year, or has earned a grade of "F" in one or more courses that year, the student will be either dismissed or given the option to be in an extended program and repeat all of the courses in that year in which

grades of "F" were received. In addition, if the student earned grades of "F" in two or more courses in a three or four course sequence in Chemical Principles of Drug Action, Pharmacology, or Pharmaceutics, he/she will be required to repeat the entire course sequence as part of the extended program. This extended program year must take place in the year immediately following that in which the failing grade(s) was (were) earned. A student is allowed to go through an extended program only once. A student is allowed to take an equivalent course at another university or a summer retake only once in the curriculum.

Failure (F or WF) in 3 or more courses in one academic year, 4 courses overall, or the same course when it is repeated will result in dismissal from the College.

If the student does not meet the criteria for satisfactory academic performance at the end of the extended program, he/she will be dismissed. To be returned to good academic standing, a student must raise his/her annual grade point average to 2.000 or above at the end of the repeat year. Such a student reenters the next professional year curriculum and resumes a full load. A reentering student must pass all courses and achieve a cumulative grade point average of 2.000 at the end of each quarter to continue at CCP.

The following policies also guide decisions made by the Student Promotion and Graduation Committee:

1. Any student with a pre-pharmacy deficiency(ies) at the time of matriculation must complete any and all deficiency(ies) prior to the beginning of the second professional year. Failure to do so will result in a delay in the start of the second professional year. Only under extraordinary circumstances are time extensions permitted by the Dean. To document completion of pre-pharmacy coursework, students must provide an official transcript(s) to the Admissions Office or Registrar.
2. Students must successfully resolve all "I" (incomplete) grades before beginning APPEs.
3. To proceed with APPEs, a student must earn an annual PS-III didactic grade point average (GPA) of at least 2.000, and must have successfully completed all pre-pharmacy and all professional core and elective PS-III level coursework.

### **Appeal Process**

Following notification of a decision for dismissal or academic deceleration, a student may appeal, in writing, the decision to the Dean. Such appeals must be received by the Dean within three working days after the student is officially notified of the dismissal or deceleration decision. The Dean makes the final decision on appeals. The Dean may grant an appeal only if a student can demonstrate one of the following:

1. Bias of one or more Committee members.
2. Material information not available to the Committee at the time of its initial decision.
3. Procedural error.

The student being evaluated may request to appear before the Committee during its deliberation.

### **Dismissal**

A student may be dismissed from the College for academic reasons upon the recommendation of the Student Promotion and Graduation Committee. The dismissal is based on the determination by the Committee that the student has not satisfactorily demonstrated that he or she possesses the aptitude to successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program. Students dismissed for poor academic performance may reapply for admission to the College. For specific readmission criteria, students should contact the Dean's Office of the College.

### **Introductory and Advanced Pharmacy Practice Experience Failures in the Pharm.D. Program**

A withdrawal failure (WF) may only be granted to a student with the approval of the Director of Experiential Education if the student is receiving a failing grade at the time of withdrawal and if the withdrawal is due to extenuating health or personal issues. A student who is requested by the preceptor or site administration to permanently leave the

IPPE/APPE site for unprofessional behavior or patient safety issues may be issued a failing grade.

When a student either fails or receives a "WF" in an APPE, he/she must petition the Student Promotion and Graduation Committee within 30 calendar days after the last day of the APPE to retake the same type of APPE. After consideration of the circumstances of the failure or "WF", the Student Promotion and Graduation Committee may exercise any of the following options:

1. Require the student to take coursework;
2. Recommend that the student take coursework;
3. Recommend that the student undergo a period of independent study; or
4. Require the student to wait a defined time period before repeating the APPE.

The Committee's options are not limited to the above and will be determined on a case-by-case basis. The timing of the retake will be as early as possible once the student has satisfied the Committee's requirements, and is subject to availability of sites as determined by the Office of Experiential Education. The retake, if granted, must be completed within 12 calendar months of the date the petition is received by the Dean's Office. If the student fails or receives a "WF" for the APPE on the retake, he/she is dismissed from studies at CCP. Students are allowed only one failed or one "WF" for an APPE and one retake of the failed or "WF" APPE while enrolled at CCP.

### **Extended Program in the Pharm.D. Program**

Problems may arise that may necessitate the deceleration of a student's academic course load. Accordingly, an individual's academic course load may be reduced so that the student enters what is termed an extended program or split academic course of study. Such a program rearranges the course schedule so that the normal time period for the program is extended, usually by one additional year. Only enrolled students may enter an extended program. To enter an extended program, either one or both of the following conditions must be met:

1. Personal hardship. If a student is experiencing unusual stresses in life and an extended academic load could alleviate added stress, the student may petition the Student Promotion and Graduation Committee for an extended program. This petition is not automatically granted and is approved only in exceptional circumstances. The Committee is responsible for evaluating the petition and submitting a recommendation concerning a student's request for an extended program to the Assistant Dean, Chicago College of Pharmacy. The Assistant Dean is responsible for reviewing and

assessing the Committee's recommendation, and then notifying the student of a decision.

2. **Academic.** As described above, a student ending an academic year with an annual GPA of less than 2.000 may be given the option to repeat courses from that year in which "F" grades were received. A student may be placed on an extended program for academic reasons at the discretion of the Student Promotion and Graduation Committee. A student placed on an extended program for academic reasons is automatically placed on academic probation and may not be returned to good academic standing until the extended program is completed.

If a student is placed on an extended program, such action does not modify or limit the Committee's actions for dismissal. Thus, the student may be dismissed for academic reasons while on an extended program.

A student placed on an extended program for academic reasons will be returned to good academic standing when he/she reenters the prescribed academic program and completes all courses that were unsatisfactory and are required for graduation.

A reentering student must achieve a cumulative grade point average of 2.000 at the end of each quarter to continue at the college. A student is allowed to go through an extended program only once and is therefore dismissed should the student earn another failing grade.

#### **Pharmacy Curriculum Outcomes Assessment**

All students are required to complete the Pharmacy Curriculum Outcomes Assessment (PCOA) examination during their third professional year.

#### **Technology**

Students must have a laptop computer to use in various learning activities. Specific specifications of the required computer will be available to students at the time of the admissions interview.

#### **Time Limit for Completion of Coursework**

The maximum allotted time for completion of the professional portion of the Pharm.D. program is six calendar years.

## **STUDENT ADMINISTRATIVE POLICIES**

#### **Absence Reporting Procedure**

In the event of illness, personal emergency, personal incapacitation, or other exceptional problem of a serious nature that causes a student to be absent from a session requiring mandatory attendance, a student must notify one of the following: CCP Dean's Office, CCP department head, or course director. To be excused from an APPE, the student must notify his/her preceptor, in addition to the OEE.

Assuming that there is a legitimate reason for a student's absence, the CCP Dean's Office will contact by telephone or email the course directors of the courses in which the student will miss an examination, quiz, or graded assignment, or will send an e-mail to all appropriate course directors that confirms in writing that the student will be absent, the reason for the absence, the courses from which the student will be absent, and the date(s) of the student's absence. This will be done as soon as possible (within 24 hours) after the student has notified CCP. If a student fails to follow this procedure, the student is held responsible for satisfying the official University procedure for obtaining an excused absence. The latter procedure is more stringent than the College policy. Unexcused absences may result in course failure.

#### **Requesting an Excused Absence for Personal Reasons**

The College recognizes that a student may desire to be excused from class or APPE for non-illness, non-emergency-related reasons from time to time. An Absence Request Form must be completed prior to the day that the student wishes to be excused. Forms are available from the CCP Dean's Office and at [www.midwestern.edu](http://www.midwestern.edu).

#### **Advanced Standing in the Pharm.D. Program**

All requests for advanced standing by newly admitted, transfer, or enrolled students are processed on a course-by-course basis by the Student Promotion and Graduation Committee. The Dean's Office provides staff support for such evaluations. To request such consideration, a student should submit a letter of request to the Dean in which the student lists a course(s) previously taken at an accredited college or university which might be similar in content to a professional course(s) that he/she is scheduled to take. The student is advised to provide an official course description(s) and a syllabus(syllabi) of the course(s) previously taken, as well. For some courses, a student may be required to take a comprehensive challenge exam. All requests must be submitted at least three weeks prior to the start of the course being considered. For APPEs, all requests must be submitted at least six months prior to the first day of the specific APPE that the student is seeking to be excused from. The decision of the Committee is forwarded to the Dean as a recommendation to either grant or deny advanced standing. Advanced standing will be considered for coursework taken in which a letter grade of "C" or better has been earned. A "C-" letter grade is not acceptable for advanced standing consideration.

No advanced standing will be awarded for professional pharmacy coursework completed at a foreign college of pharmacy.

#### **Attendance**

Upon acceptance to the Chicago College of Pharmacy, students are expected to devote their entire efforts to the academic curriculum. The College actively discourages

employment that will conflict with a student's ability to perform while didactic and experiential courses are in session and will not take outside employment or activities into consideration when scheduling classes, examinations, reviews, field trips, or individual didactic or experiential course functions. Class attendance is mandatory for all students during experiential courses (IPPEs and APPEs). Refer to the student IPPE or APPE manual for specific details regarding this policy.

### **Class Standing**

To achieve the status of a second-year student in the professional program (PS-II), students must have successfully completed all requisite first-year courses and earned an annual GPA of 2.000. To achieve the status of a third-year student in the professional program (PS-III), students must have successfully completed all requisite second-year courses and earned an annual GPA of 2.000. To achieve the status of a fourth-year student in the professional program (PS-IV), students must have successfully completed all requisite third-year courses and earned an annual GPA of 2.000.

### **College Resolution on Comprehensive Assessment in Coursework**

Whereas, comprehensive assessment in coursework promotes learning retention and accountability, and whereas, these qualities prepare students for practical experience, be it resolved that the faculty of the Chicago College of Pharmacy encourage the use of comprehensive assessment tools throughout its curriculum.

### **Dean's List**

Following each quarter, the Chicago College of Pharmacy recognizes students who have distinguished themselves by achieving a GPA of 3.500 or better for the quarter. This applies for full-time didactic and IPPE coursework only. Students who are currently undergoing an extended program are not eligible for the Dean's List.

### **Disciplinary Probation**

Disciplinary probation may be designated for student acts of professional misconduct as defined in Appendices 2 and 4 of the Midwestern University Student Handbook. Disciplinary probation is not noted on the transcript but is kept in a secure file in the Office of Student Services.

### **Faculty Mentorship**

The Chicago College of Pharmacy assigns a faculty mentor to students in each entering class whose role is to assist with academic and nonacademic concerns. In addition to these faculty, staff in the College Office of the Dean and the Dean of Students, as well as other faculty members and staff, are also available to assist students with academic advising, counseling, professional enrichment activities, and nonacademic problems. Students are assigned a faculty selected from the College faculty. Students will likely have the same throughout their academic careers.

During orientation, mentors meet their new students in groups of approximately 10 students. These groups may serve as the workshop groups for courses within the curriculum. Faculty act as liaisons between the faculty and students. Their responsibilities include:

1. Serving as the student's mentor and academic/professional counselor.
2. Monitoring the academic progress and professional growth of the student.
3. Assisting the student in seeking academic and personal counseling services provided by the institution.
4. Serving as an advocate for the student.
5. Counseling the student during his/her selection of a career within the pharmacy profession.
6. Grading of select assignments in select courses may be required of the mentor.

### **Grades**

Letter grades corresponding to the level of achievement in each course are assigned based on the results of examinations, required coursework, and, as applicable, other criteria established for each course. Individual faculty have the prerogative to use a plus/minus letter grading system or a whole letter grading system. Elective courses may be offered as pass/fail upon the direction of the faculty. The following letter grades are not used for any courses: "C-", "D+", "D", or "D-".

Courses are recorded in terms of quarter hour(s) of credit. Multiplication of the credits for a course by the numeric value for the grade awarded gives the number of quality points earned for a course. Dividing the total number of quality points earned in courses by the total number of credits in those courses gives the grade point average.

Grades reported as "W", "WF", and "P" are recorded on a student's permanent record but are not used in the calculation of a student's grade point average. Similarly, a grade of "I" or "IP" may be assigned and is used only when special/extenuating circumstances exist (e.g., prolonged illness, family crisis, etc.), which prevent a student from completing the necessary course requirements on time in order to receive a grade.

Any request for an extension to complete course or APPE requirements must be approved first by the course director responsible for the course or APPE.

If a student receives an "F" grade in a course, that grade will be recorded on his/her transcript. This deficiency may be corrected as recommended by the Student Promotion and Graduation Committee. The decision to permit a student to repeat the course rests with the department offering the course and the Committee.



Following successful repetition of the course, the permanent record of the student will be updated to indicate that the failing grade has been successfully corrected.

If a student repeats a course, the course is entered twice in the permanent record of the student. The grade earned each time

in the course is recorded, but only the most recent grade is used in the computation of the student's cumulative grade point average. When a course is repeated, the student can earn any grade that is within the grading scale of the course.

**Grade and Quality Point Scale for Students Admitted in Fall 2008 or Thereafter**

Grade	Quality Points (per credit)	Comments
A	4.000	-
A-	3.670	-
B+	3.330	-
B	3.000	-
B-	2.670	-
C+	2.330	-
C	2.000	-
F	0.000	-
I	0.000	An Incomplete (I) grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days starting from the last day of final examinations for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar.
IP	0.000	An In-Progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of "P" is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
WF	0.000	Withdrawal/Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the Program/School. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation. W/F may be considered as a failure by a Student Academic Review Committee. Multiple F's and W/F's can be grounds for dismissal.
AU	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
AP		This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals, but is not counted in the GPA calculation.

### Graduation Honors in the Pharm.D. Program

Graduation honors are awarded to candidates for the full-time Pharm.D. degree who have distinguished themselves by virtue of high academic achievement while enrolled in the professional program at Midwestern University. Only grades from academic courses taken at the University will be included in determining graduation honors. Only didactic and IPPE courses are included in the calculation of cumulative grade point for graduation honors. Students who receive a failing grade in any course (including APPEs) will not be eligible for graduation honors regardless of their GPA.

#### Didactic Course

Grade Point Average	Graduation Honor
> 3.900	Summa cum laude
3.750 - 3.890	Magna cum laude
3.500 - 3.740	Cum laude

### Last Day to Add/Drop Module Classes or IPPE and APPE Courses

A pharmacy student will be able to add a module prior to the start of the first meeting of a module. After that, a student may add a module only with the consent of the course director.

A pharmacy student will be able to drop a module prior to the start of the second meeting of a module. In this case, when a student drops a module, the student's transcripts will not reflect registration in the module at all.

After the start of the second class meeting of a module, a student may withdraw from a module only with the approval of the course director and the Dean's Office. In this case, when a student receives approval to withdraw, a "W" grade will be entered onto the student's transcript after the course number and name of the course.

A student who withdraws from a module after the official start of classes for a quarter, and who does not receive approval from the Dean's Office, will receive a "WF" grade on his/her transcript after the course number and name of the course.

IPPE and APPE courses may be added or dropped only with the approval of the Office of Experiential Education and the Dean's Office. Should the student drop a rotation after the first week of rotation activity, the student will receive a grade of "W" or "WF".

### Leave of Absence from APPEs in the Pharm.D. Program

Refer to the University policy. Requests for leaves from the Pharm.D. Program must be in writing and forwarded to the Dean by September 1 of the PS-III year of the Pharm.D. program. No requests for leaves of absence will be permitted after this time except for extraordinary circumstances. Once

APPEs have started, the minimum approved length of time for a leave of absence is six months.

### Liaison Committees

Student-Faculty Liaison Committees meet as needed during the academic year and serve as a forum for the interchange of ideas, suggestions, and discussion of academic problems of interest to students enrolled in the various years of the College program. The chair of each committee is appointed by the Dean.

It is the responsibility of newly elected student liaisons to meet with the chair of the Student Faculty Liaison Committee at the start of the academic year prior to the first meeting of the committee. The faculty chair will review the role of the committee and the responsibilities of the student liaisons to their class. A committee is formed for each professional class at the College and is composed of the following members:

1. Student-Faculty Liaison Committee, First Year: Course directors for each of the courses for any given quarter, the Chairs of the Departments of Pharmaceutical Sciences and Pharmacy Practice, and two students elected by the first-year class. Two PS-I student volunteers will be appointed during the first week of classes to serve as interim liaisons until official elections are held.
2. Student-Faculty Liaison Committee, Second Year: Course directors for each of the courses for any given quarter, the Chairs of the Departments of Pharmaceutical Sciences and Pharmacy Practice, and two students elected by the second-year class.
3. Student-Faculty Liaison Committee, Third Year: Course directors for each of the courses for any given quarter, the Chairs of the Departments of Pharmaceutical Sciences and Pharmacy Practice, the Director of Experiential Education, and two students elected by the third-year class.
4. Student-Faculty Liaison Committee, Fourth Year: Course directors for each of the courses for any given quarter, the Chairs of the Departments of Pharmaceutical Sciences and Pharmacy Practice, the Director of Experiential Education, and two students elected by the fourth-year class.

## AWARDS AND SCHOLARSHIPS

### *American Institute of the History of Pharmacy Award*

A certificate of recognition is presented to a student who has best demonstrated some type of pharmaco-historical activity.

### *Bernard B. Brody-Rho Pi Phi Jurisprudence Scholarship*

The Bernard B. Brody-Rho Pi Phi Jurisprudence Scholarship is a monetary award that is presented to a PS-IV student with outstanding performance in the CCP pharmacy law course.

#### *Beverly Talluto Memorial Scholarship*

A monetary award is presented to a second year student who possesses solid leadership, interpersonal and academic skills and a demonstrated commitment to community service.

#### *Chicago College of Pharmacy 20th Anniversary Award*

A monetary award is presented to a second year student in good academic standing who demonstrates financial need and commitment to the College as demonstrated by service to the College or University, their fellow students, and the profession.

#### *Chicago College of Pharmacy Legacy Admission Scholarships*

Scholarships are awarded to newly admitted pharmacy students with exemplary pre-pharmacy coursework performance. Student recipients are selected by the Admissions Committee.

#### *Chicago College of Pharmacy Alumni Council Award*

A monetary award is presented to a third year student in good academic standing who exemplifies collaboration within the University community and has a demonstrated record of volunteering to serve others in need. The award recipient is provided with a one-year honorary membership in the CCP Alumni Council for the following year.

#### *Chicago College of Pharmacy Departmental Awards*

Four monetary awards are presented each year to graduating students who are deemed outstanding in medicinal chemistry, pharmaceuticals, pharmacy administration, or pharmacotherapeutics.

#### *Chicago College of Pharmacy PCOA Excellence Award*

Certificates of recognition are presented to the students who achieve PCOA scores at or above the 75th percentile. Students complete the PCOA during their third year and this recognition is presented to students during their final year and noted in the graduation program.

#### *Chicago College of Pharmacy Scholars in Leadership and Diversity Scholarship*

A monetary scholarship is presented to an under-represented minority PS-II or PS-III student who has demonstrated leadership capabilities and a commitment to enhancing diversity in the pharmacy field.

#### *Chicago College of Pharmacy Student Professionalism Scholarships*

Scholarships are presented to PS-I, PS-II, PS-III and PS-IV students who have been nominated by the faculty for exemplary professional behavior in all interactions with faculty, staff and colleagues and have a commitment to the profession through leadership activities in pharmacy organizations.

#### *CVS Foundation Pharmacy Student Scholarships*

Scholarships are awarded each year to students who are in

good academic standing and have demonstrated interest in community pharmacy practice.

*CVS Foundation Spanish Pharmacy Student Scholarship*  
Scholarships are awarded each year to an under-represented minority student who has a demonstrated interest in community pharmacy practice.

#### *Dhingra Family Award*

A monetary award is presented annually to a second year student who exemplifies professionalism and leadership. The recipient of this award is selected by the Dean of the Chicago College of Pharmacy.

#### *John and Angie Dik Scholarships*

Scholarships are awarded to PS-II or PS-III students who have entrepreneurial spirit and leadership qualities. The recipients of this award must be in good academic standing and in financial need.

#### *Emerging Community Scholarship*

These awards will be presented to students with an incoming cumulative grade point average of 3.25 or higher, and a demonstrated interest in community pharmacy. Applicants for these awards are reviewed and selected by the Admissions Committee.

#### *Emerging Research Scholarship*

An admissions scholarship is presented to a newly admitted student who has a demonstrated interest in research and a cumulative science GPA of 3.00 or higher. Applicants for this award are reviewed and selected by the Admissions Committee.

#### *Facts and Comparisons Award of Excellence in Clinical Communication*

One year subscriptions to Facts & Comparisons<sup>®</sup>, eAnswers online drug reference and Lexi-COMplete mobile app from Lexicomp<sup>®</sup> are presented to a graduating student who has demonstrated superior verbal and written clinical communication skills.

#### *George Lee Scholarship*

A monetary award is presented to a PS-III or PS-IV student who has demonstrated academic excellence, leadership, and sustained participation in community service or societal improvement programs.

#### *Illinois Council of Health-Systems Pharmacists (IChP) Student Award*

This monetary award and plaque are given to a PS-III student with good academic performance, leadership skills, past history of employment in a hospital or hospital-affiliated facility, and active membership in IChP. The student must also be an Illinois resident or Illinois high school graduate.

*Illinois Pharmacists Association (IPhA) Foundation Student Leadership Award*

This monetary award and one-year membership in IPhA is given to the graduating student who is an active member of IPhA and who promotes pharmacy through leadership and involvement in professional associations.

*Iqbal Archa Scholarship*

This award is presented to a PS-II or PS-III student who is a hardworking parent that is raising a family and has demonstrated financial need. The recipient of this award must also be in good academic standing.

*Jewel-Osco/Albertson's Companies Scholarships*

Scholarships are awarded each year to pharmacy students interested in entering chain community pharmacy.

*Kloudscript Innovation Award*

A monetary award is presented to a second or third year student who demonstrates interest in innovation and incubation of ideas that advance the practice of community pharmacy and patient engagement, as described in a 1-2 page essay. The student must have a cumulative grade point average of 3.25 or higher.

*Leadership Admission Scholarships*

These awards are given to newly admitted pharmacy students with a cumulative GPA of 3.25 or higher and demonstrated leadership as described in their admissions application. The recipients of these awards are selected by the Admissions Committee.

*Lilly Achievement Award*

This award is given for superior scholastic and professional achievement. Leadership qualities as well as professional attitude are considered along with academic performance in selecting the graduating student for this honor.

*Manek Scholarship*

A monetary award is presented to a PS-II student who is hard-working and demonstrates extreme financial need.

*Mary Anne Clinton Memorial Scholarship for Community Service*

This monetary award is presented to a student who has demonstrated concern for social consciousness or global well being. Demonstration of this philosophy could be through active participation in alcohol and drug awareness, animal rights, educational advancement of underserved populations, and environmental awareness.

*Mary Beth Stanaszek Memorial Scholarship*

This annual monetary award and plaque is given to an outstanding pharmacy student in the second or third professional year who has assumed leadership in pharmacy student organizations or student government, demonstrated commitment to patient care and patient education, and has financial need.

*Meijer Drug Company Scholarship*

A scholarship is awarded each year to a student interested in entering chain community pharmacy.

*Milo Gibaldi Award for Research and Scholarship*

A monetary award is presented to a PS-IV student with an outstanding record of achievement in research and/or scholarly publication.

*MK Education Pharmacy Student Scholarship*

This award is given to a PS-III or PS-IV student who demonstrates exemplary verbal communication skills and has a focus on teaching, training, or academics.

*Mylan Excellence in Pharmacy Award*

Mylan presents a limited edition lithograph and framed certificate award to a PS-III or PS-IV student who has performed well professionally and academically, with special emphasis on the provision of drug information services.

*National Association of Chain Drug Stores (NACDS) Foundation Scholarship*

A scholarship is awarded to a student who is in good academic standing with demonstrated interest in pursuing a career in community pharmacy.

*Osmond Lewis Memorial Award*

This memorial scholarship is presented to a second or third year under represented minority student who is in good academic standing and demonstrates, by their involvement in activities since beginning at MWU-CCP, that they have a strong commitment to community outreach.

*Rachel M. and Willard C. Schmidt Scholarship*

The scholarship will be given to a deserving PS-II student with demonstrated financial need, who has an interest in geriatrics, is a Chicago Cubs fan and who has demonstrated a commitment to community service.

*U.S. Public Health Service for Excellence in Public Health Pharmacy Practice Award*

A mounted certificate is presented to a student who has either advanced the "Healthy People 2020 Goals" through participation in educational and community-based programs, provided service to the medically underserved, volunteered for a health-related service, or provided outstanding leadership to foster the team approach to patient care.

*Walgreens Minority Scholarship*

A scholarship is given each year to an incoming under-represented minority student based on his/her academic merit, extracurricular activities and financial need.

*Walgreens Diversity and Inclusion Excellence Award*

This scholarship is awarded to a student who embraces diversity and promotes diversity and inclusive initiatives on campus.

*Walgreen Diversity Scholarship*

This scholarship is awarded to one or more students of an under represented minority group with an interest in community pharmacy.

*Wal-mart Pharmacy Scholarship Award*

A scholarship is given to a PS-III student with high scholastic standing, strong leadership qualities, and an interest in entering community pharmacy practice.

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College of Pharmacy  
Chair, Postgraduate Year One Community Pharmacy  
Residency Program Coordinator and Professor



# COLLEGE OF HEALTH SCIENCES

## MISSION

The College of Health Sciences (CHS) is dedicated to excellence in the education of professionals who will meet the healthcare and service needs of the community. This mission is expressed in the education, scholarship, and service objectives of the programs of the College of Health Sciences.

## STUDENT ACADEMIC POLICIES

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### Academic Monitoring

All students enrolled in CHS are expected to:

1. Maintain satisfactory academic progress in their course of study;
2. Understand and meet all established program/school/College academic and professional requirements and standards as described in the course syllabi, program-related manuals, University Catalog, and Student Handbook;
3. Self-monitor their academic performance in all required courses;
4. Complete all course-related requirements in a timely and satisfactory manner;
5. Seek assistance if encountering academic difficulty;
6. Contact the appropriate Program/School Director and/or course coordinator when performance has been unsatisfactory; and
7. Regularly check home or campus mailbox at least twice a week and university e-mail account daily for information concerning educational programs. This is particularly important at the end of the quarter and during quarter breaks when information

concerning academic performance may be distributed.

### Academic Review and Progression

The academic progress of each student enrolled in the College is regularly monitored to determine whether he/she is making satisfactory academic progress in his/her program of study based on stated criteria established by the program/school/College. The academic review process occurs at three levels: the program/school-based Student Academic Review Committee, the College-based Student Promotion and Graduation Committee, and the CHS Dean.

### Student Academic Review Committees

The Student Academic Review Committee of each program/school is appointed annually by the University Faculty Senate with the recommendation of the Program/School Director. Membership consists of three or more program/school faculty members and the Program/School Director (or his/her designee) who is the chair of this committee. The Dean of Students and the CHS Dean or his/her designee are ex-officio members without vote.

At the end of each quarter and more often if necessary, this committee reviews and acts upon the academic progress of each student enrolled in the program. If satisfactory, the committee recommends progression of the student to the next quarter. If unsatisfactory, the committee recommends whether a student is placed on academic warning, academic probation, extended program, academic leave of absence, or is dismissed. These recommendations are forwarded to the student, the chair of the CHS Student Promotion and Graduation Committee, and the CHS Dean. Following notification, a student may appeal the recommendation to the CHS Student Promotion and Graduation Committee. The CHS Student Promotion and Graduation Committee will review the student's appeal and make a recommendation to the CHS Dean. The CHS Dean is responsible for reviewing all recommendations for consistency with stated College academic policies and practices. The Dean makes the final decision on the action to be taken.

The Student Academic Review Committee also recommends for graduation students who have satisfactorily completed all degree requirements specified by their respective program/school. These recommendations are forwarded to the CHS Student Promotion and Graduation Committee for review. Minutes of each meeting must be filed with the appropriate Program/School Director and the CHS Dean.

#### **CHS Student Promotion and Graduation Committee**

This committee is appointed annually by the University Faculty Senate. Members include the CHS Program/School Directors, two faculty members from each program/school within CHS and two faculty members from the basic science departments. The Registrar, Dean of Students, and the CHS Dean or his/her designee are ex-officio members without vote.

At the end of each academic year, the committee reviews the recommendations from the individual Student Academic Review Committees and assesses the academic and professional progress and performance of each student. If satisfactory, the committee recommends promotion of the student. In addition, the committee meets each spring, or as needed, to recommend for graduation all students who have satisfactorily completed all degree requirements specified by their program/school. The committee's recommendations are forwarded to the CHS Dean and the University Faculty Senate for approval. The committee also reviews student appeals of Student Academic Review Committee recommendations. The chairperson of the committee is responsible for submitting minutes of each meeting to the CHS Dean.

#### **Satisfactory Academic Progress**

To achieve satisfactory academic progress, a student enrolled in a degree program in CHS must pass all required courses and maintain a minimum cumulative grade point average. For most programs in CHS, students are required to maintain a cumulative grade point average of 2.750 or higher. The following programs have exceptions to the minimum 2.750 GPA requirement and/or additional criteria for satisfactory academic progress.

*Arizona School of Podiatric Medicine (AZPod):* A student enrolled in the Arizona School of Podiatric Medicine must pass all courses and maintain a cumulative grade point average of 2.000 or higher to have achieved satisfactory academic progress.

*Clinical Psychology (CP) Program:* A student enrolled in the Clinical Psychology Program must pass all courses and

maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a minimum grade of "B-" or "P" in all required courses, seminars, and practica. To progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

*Nurse Anesthesia (NA) Program:* A student enrolled in the Master of Science in Nurse Anesthesia Program must pass all courses and maintain a cumulative grade point average of 2.750 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a "B-" or higher in all NAAPG curriculum courses, as well as in all clinical rotation and clinical didactic component courses. A student enrolled in the Doctor of Nurse Anesthesia Practice (D.N.A.P.) completion degree program must pass all courses, maintain a cumulative grade point average of 2.75 or higher, and achieve a "B-" or higher in all DNAPG courses.

*Occupational Therapy (OT) Program - Downers Grove Campus:* A student enrolled in the Doctor of Occupational Therapy (OTD) Program must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress.

*Physician Assistant (PA) Program - Downers Grove Campus:* A student enrolled in the Physician Assistant Program must pass all courses and maintain a cumulative grade point average of 2.750 or higher to have achieved satisfactory academic progress. In addition, to progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

*Physician Assistant (PA) Program - Glendale Campus:* A student enrolled in the Physician Assistant Program must pass all courses and maintain a cumulative grade point average of 3.000 or higher to have achieved satisfactory academic progress. In addition, to progress to the next quarter, a student must satisfactorily complete all academic and professionalism requirements for the preceding quarter. A student is not able to progress to clinical rotations until or unless their cumulative GPA is greater than or equal to 3.000.

*Speech-Language Pathology (SLP) Program:* A student enrolled in the Speech-Language Pathology Program must pass all didactic courses with a grade of C or higher, pass all clinical courses, and maintain a minimum cumulative grade point average of 3.000 to have achieved satisfactory academic progress.

### Academic Progress

Outcome	Usual Action <sup>1</sup>	Transcript Notation
No course failures; cumulative GPA $\geq 3.000$ (CP, OT-IL, PA-AZ, SLP) or $\geq 2.750$ (CVS, NA, OT-AZ, PA-IL, PT) or $\geq 2.000$ (AZPod)	Allowed to progress to the next quarter	---
No course failures; one quarter of cumulative GPA $< 3.000$ (CP, OT-IL, PA-AZ, SLP) or $< 2.750$ (CVS, NA, OT-AZ, PA-IL, PT) or $< 2.000$ (AZPod)	Academic warning for the subsequent quarter	Academic warning is not noted on the transcript.
One course failure <sup>2</sup> ; and/or two quarters of cumulative GPA $< 3.000$ (CP, OT-IL, PA-AZ, SLP) or $< 2.750$ (CVS, NA, OT-AZ, PA-IL, PT) or $< 2.000$ (AZPod)	Academic probation for the subsequent quarter or until all academic requirements are met. In addition, one or more of the following may apply: a) Retake of the failed course if eligible and/or if the course is required b) Academic leave of absence for up to one year until course is retaken or any requirements for re-entry established by the program have been met c) Extended program <i>Note:</i> Students on an extended program may be subject to academic LOA or dismissal after additional course failures or failure to maintain the required cumulative GPA.	"F" grade is listed on transcript and is counted toward GPA calculation and total number of accumulated failures. Following successful retake of the course, the original "F" grade remains on the transcript as an "F" but is no longer factored into the GPA calculation. The new grade will be factored into the GPA.  Academic probation and extended program are not noted on transcript. Academic leave of absence is noted on transcript.
Three or more quarters of cumulative GPA $< 3.000$ (CP, OT-IL, PA-AZ, SLP) or $< 2.750$ (CVS, NA, OT-AZ, PA-IL, PT) or $< 2.000$ (AZPod)	a) Academic probation for the subsequent quarter or until all academic requirements are met, or b) Academic leave of absence <sup>3</sup> and academic probation, or c) Extended program and academic probation, or d) Dismissal	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.
Two or more course failures <sup>2</sup>	a) Academic leave of absence <sup>3</sup> and academic probation, or b) Extended program and academic probation, or c) Dismissal  <i>Note:</i> Two or more course failures will typically result in dismissal.	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.

<sup>1</sup> The Student Academic Review Committee or the CHS Student Promotion and Graduation Committee may recommend any of the options listed among the usual actions described for each academic situation under review.

<sup>2</sup> WF may be considered as a course failure by a Student Academic Review Committee.

<sup>3</sup> May or may not be preceded by academic warning/probation.

### **Unsatisfactory Academic Progress**

If a student fails to make satisfactory progress in completing his/her prescribed course of study, he/she is placed on academic warning, academic probation, extended program, academic leave of absence, or is dismissed. The Student Academic Review Committee or the CHS Promotion and Graduation Committee may recommend any of the options listed among the usual actions described for each academic situation under review.

Students will be notified by the CHS Dean when they are placed on academic warning as a result of their failure to achieve the required minimum cumulative GPA established by their program/school. Any student with academic deficiencies to be addressed by the Student Academic Review Committee shall be notified in writing with a delivery confirmation (i.e., next-day express mail, e-mail or hand-delivery) by the chair of the Student Academic Review Committee at least two working days in advance of the scheduled meeting in which the student's case will be heard. The student may request and shall be permitted to appear before the Student Academic Review Committee (in person or via telephone) to present his/her case. In such instances, the student shall inform the chair of the Student Academic Review Committee, in writing, of his/her desire to appear before the committee or his/her intent to waive this right. If the student chooses to appear before the committee, this prerogative extends to only the involved student and not to any other individuals. A student whose academic progress will be subject to review by his/her Student Academic Review Committee and who wishes to appeal a course grade must do so in an expedited manner prior to the scheduled meeting of the Committee. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Grade Appeals Policy.

Within two working days following the committee meeting, the chair of the Student Academic Review Committee is responsible for providing notification in writing with a delivery confirmation (i.e., next-day express mail, e-mail, or hand-delivery) to the involved student, informing him/her of the recommendation of the committee. In all instances, the chair of the Student Academic Review Committee shall be responsible for informing the CHS Dean and chair of the CHS Student Promotion and Graduation Committee of each recommendation made by the committee. Following notification of a recommendation by the Student Academic Review Committee, a student may appeal the recommendation to the CHS Student Promotion and Graduation Committee (see Appeal Process). The CHS Student Promotion and Graduation Committee will review the student's appeal and make a recommendation to the CHS Dean. The Dean is responsible for reviewing all recommendations for consistency with stated College academic policies and practices. The Dean is responsible for

providing written notification of the final decision to the student and to all appropriate academic support offices (i.e., Registrar, Student Financial Services, etc).

### ***Academic Warning***

Academic warning is a formal notification of substandard academic performance and cautions the student that continued performance at this level might result in academic probation. An academic warning is issued by the Dean's Office when a student earns a cumulative GPA below the minimum GPA required by his/her respective program/school for one quarter. An academic warning can be issued by the Program Student Academic Review Committee when the student fails to meet any other established program academic requirements. An academic warning is in effect for one quarter. Academic warning is not noted on the student's transcript but is noted in the student's academic file that is kept in the program office. If the student achieves the minimum standard of academic performance required by the program/school during the quarter of academic warning, the student is returned to good academic standing. This is also noted in the student's file.

### ***Academic Probation***

Academic probation represents notice of unsatisfactory academic progress. Academic probation typically occurs when the student fails a class during his/her academic program and/or earns a cumulative GPA below the minimum required by his/her respective program/school for two quarters (which do not have to be consecutive) and/or when the student fails to meet any other established program academic requirements. Academic probation is not noted on the student's transcript but is noted in the student's academic file in the program/school office. The student remains on academic probation until the failure is successfully repeated and/or the cumulative GPA is at or above the program's required minimum and all deficiencies have been corrected. Subsequently, when the student is returned to good academic standing, this is also noted in the student's file.

### ***Extended Program***

When a student is not allowed to progress in the standard program curriculum due to course failure, failure to maintain the required cumulative GPA for two or more quarters, and/or failure to meet any other established program academic requirement, the Student Academic Review Committee may place the student on an extended program. While on an extended program, students will be permitted to take elective courses or to retake courses in which they have received a grade of "C" or less. Students will be able to resume the standard program curriculum upon successful completion of all programmatic requirements.

Extended program is not noted on the student's transcript. Leave of absence will be noted on the transcript for periods of non-enrollment during the extended program period.

### ***Academic Leave of Absence***

Academic leave of absence may occur when a student has failed one or more courses, has accumulated two or more quarters when the cumulative GPA is less than required by his/her program/school, or has not met programmatic criteria required to proceed in the curriculum. Academic leave of absence may or may not be preceded by academic probation. This action results in the suspension of the student from all academic courses for a period of up to one year, or until all program/school requirements for re-entry have been fully met. A mandatory academic leave of absence is noted on the student's transcript.

The student who has been placed on a mandatory academic leave of absence does not have to re-apply for admission and is guaranteed reentry into his/her academic program upon successful completion of all failed courses and/or when all programmatic requirements are met. Upon reentry to the academic program, the student is routinely placed on academic probation for the following quarter.

### ***Academic Dismissal***

A student may be dismissed from the College for academic reasons upon the recommendation of the program/school's Student Academic Review Committee. The dismissal is based on the determination that the student has not satisfactorily demonstrated that he/she can successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program/school. Students who accumulate two or more failures or three quarters below the minimum required grade point average may receive a recommendation for dismissal. The course failures and/or the three-quarters with less than the required minimum cumulative GPA do not have to be consecutive.

### ***Retake of a Failed Course***

If a student passes a repeated course, the original failure remains on the transcript as an "F" grade and is included in the total number of accumulated failures in the student's academic record. The grade from the original failed course is no longer used in the computation of the GPA following repeat of the course. The grade from the repeated course will be factored into the overall GPA.

Under exceptional circumstances, such as academic probation or extended program, students may retake a Midwestern University course in which they have earned a "C." The Program/School Director and the CHS Dean must approve this retake option. Typically, a maximum of three courses with "C" grades can be retaken, and a course may only be retaken once. The original "C" grade will remain on the transcript but will not be used in the computation of the GPA following the completion of the repeated course. The new grade will be factored into the overall GPA.

All repeated courses are subject to additional tuition. Students should consult with their financial aid advisor regarding the financial implications of repeated coursework.

### ***Readmission After Dismissal for Poor Academic Performance***

It is at the discretion of each CHS academic program to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit a new application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek the advice of an admissions counselor. It is expected that the individual would have addressed documented deficiencies before reapplication and be able to demonstrate that he/she meets all admission requirements and technical standards of the program.

The program/school's Admissions Committee will review completed applications of candidates and submit recommendations to the Program/School Director for action. The CHS Dean, via the Office of Admissions, then notifies applicants in writing of admission decisions.

No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Reapplications are allowed only within the first two years following dismissal and readmission will be granted only once.

### ***Advanced Placement/Exemption from Coursework***

Some programs in CHS may allow for the transfer of credits from graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. All requests for advanced placement by newly admitted or transfer students are processed on a course-by-course basis by the program/school's Admissions or Education Committee. To request such consideration, a student must submit a letter of request to the Program/School Director in which the student lists a course(s) previously taken which might be similar in content to a professional course(s) that he/she is scheduled to take. The student must also provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken. The program/school's Committee will share the submitted course materials with the appropriate course director to determine if the course(s) is an appropriate substitute. All requests must be submitted prior to matriculation. Each program/school determines the minimum letter grade of coursework for advanced placement. Typically, advanced placement will only be considered for coursework in which a minimum letter grade of "B-" or "C" or has been earned. A "C-" letter grade is not acceptable for advanced placement consideration. Some programs/schools may have additional requirements. If the Admissions or Education Committee denies the request for advanced

placement, the student may appeal this decision to the CHS Dean.

If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement (AP) notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation.

### **Appeal Process**

Following notification of a recommendation from the Student Academic Review Committee, a student may appeal the recommendation. He/she has three working days to submit a formal written appeal of the recommendation to the CHS Student Promotion and Graduation Committee. The appeal must be submitted in writing and delivered to the chair of the CHS Student Promotion and Graduation Committee and the Office of the Dean within this three-day period. A narrative explaining the basis for the appeal should accompany the request. An appeal must be based on one of the following documented premises:

1. Bias of one or more members of the Student Academic Review Committee.  
*Note: The student must present specific evidence that the committee member(s) demonstrated bias against him/her in conducting the academic review process.*
2. Material, documentable information not available to the committee at the time of its initial decision.  
*Note: The student must provide a detailed explanation of why the new information is relevant and why it was not made available to the committee members during the academic review process. The student should be prepared to produce pertinent documentation at the appeal meeting.*
3. Procedural error.  
*Note: The student must provide evidence that the committee did not correctly follow the procedures related to the conduct of the academic review process; for example, the student was not given notice of the meeting or committee recommendation in accordance with stated policies.*

The CHS Student Promotion and Graduation Committee will review student appeals. A majority of faculty members on each committee must be from outside the program/school from which the student is appealing. One member of the appeal committee must be from the student's program/school and is a non-voting member. The committee will review and assess the student's appeal. Any student requesting an appeal shall be notified in writing with a delivery confirmation (i.e., next-day express mail, e-mail or hand-delivery) by the chair of the committee at least two working days in advance of the scheduled meeting in which the student's case will be heard.

The student may request and shall be permitted to appear before the committee (in person or via telephone) to present his/her case. In such instances, the student shall inform the chair of the committee, in writing (i.e., e-mail or hand-delivery), of his/her desire to appear before the committee or his/her intent to waive this right. If the student chooses to appear before the committee, this prerogative extends to the involved student only and not to any other individuals. The committee may request that a course director and/or faculty advisor attend the meeting to provide additional information about the student's case. After review of the appeal, the committee chair submits the committee's recommendation to the Dean and notifies the chair of the Student Academic Review Committee. Upon receipt of the Student Promotion and Graduation Committee's recommendation, the Dean will make a decision, typically within ten working days, and then notify the student, the chairs of the Student Academic Review Committee and the CHS Student Promotion and Graduation Committee, and all appropriate support offices. The decision of the Dean is final.

Students must attend all didactic courses in which they are registered until the appeal process is complete. Students who fail a core or prerequisite course should consult with the Program/School Director regarding attendance in courses in the subsequent quarter. Students registered in a clinical course (rotation, practicum, etc.) may be placed on a mandatory academic leave of absence until the appeal process is finalized.

### **Auditing a Course for Remedial Purposes**

The Student Academic Review Committee may determine that a student should be enrolled in a previously taken course on a temporary, audit basis. Under these circumstances, a student can attend classes and labs, receive handouts, and participate in exams to assess learning on an informal, non-graded basis. No course credits or grade may be earned for an audited course. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Course Auditing Policy.

### **Class Standing**

To progress to the next year in a professional program/school of the College, students must have satisfactorily completed all academic requirements for the preceding year of the professional program/school curriculum.

### **Faculty Mentor Program**

Most CHS academic programs assign a faculty mentor to students in each entering class. The faculty mentor assists with academic concerns. In addition to these faculty mentors, the CHS Dean, Assistant Dean, and the Dean of Students are also available to assist students. The student determines the amount of interaction with his/her faculty mentor. It is the student's responsibility to initiate contact with the faculty mentor for assistance.

CHS faculty mentors act as liaisons between the faculty and students. Their responsibilities include:

1. Serving as the student's advisor and academic/professional counselor;
2. Overseeing and monitoring the academic progress and professional growth of the student;
3. Assisting the student in seeking academic and personal counseling services provided by the institution;
4. Serving as an advocate for the student;
5. Counseling the student during his/her selection of a career within the profession.

## Grading System

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93-100	4.000	-
A-	90-92	3.670	-
B+	87-89	3.330	-
B	83-86	3.000	-
B-	80-82	2.670	-
C+	77-79	2.330	Does not apply to the Clinical Psychology or Nurse Anesthesia Programs (NAAPG or DNAPG courses)
C	70-76	2.000	Does not apply to the Clinical Psychology or Nurse Anesthesia Programs (NAAPG or DNAPG courses)
F	< 70	0.000	-
F	< 80	0.000	For the Clinical Psychology and Nurse Anesthesia Programs (NAAPG or DNAPG courses)
I	-	0.000	An Incomplete grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades will be resolved within 10 calendar days from the end of final examinations for the quarter or they will automatically be converted to a grade of "F." In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar.
IP	-	0.000	An In-Progress grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	-	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	-	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	-	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
WF	-	0.000	Withdrawal Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the program/school. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation. "WF" may be considered as a failure by a Student Academic Review Committee. Multiple "F's" and "WF's" may be grounds for dismissal.
AU	-	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter.
AP			This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement is applied toward credit hour accruals, but is not counted in the GPA calculation.



### **Grade Point Average**

The grade point average (GPA) is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated initially at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or accepted for advanced placement or for courses with a grade of withdrawal (W), withdrawal failing (WF), or pass (P). Additionally, failing (F) grades for courses that are successfully repeated are not included in the GPA. Under exceptional circumstances and with the approval of the Program/School Director and Dean, students may retake a course in which they received a grade of "C." In such cases, the original grades remain on the transcript but only the new grades are used in the computation of the GPA.

### **Graduation**

The following degrees will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements: Master of Science in Cardiovascular Science, Master of Arts in Clinical Psychology, Doctor of Psychology in Clinical Psychology, Master of Science in Nurse Anesthesia, Doctor of Nurse Anesthesia Practice, Master of Occupational Therapy, Doctor of Occupational Therapy, Doctor of Physical Therapy, Master of Medical Science in Physician Assistant Studies, Doctor of Podiatric Medicine, or Master of Science in Speech-Language Pathology.

### **Immunization Policy**

Full-time students enrolled in a program with a clinical component are required to have all immunizations and titers as outlined in the general policy section of the Student Handbook.

### **Leave of Absence**

Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Leave of Absence Policy. Before voluntarily requesting a leave for personal reasons or after being placed on a mandatory leave for academic reasons, a student must make an appointment

with the appropriate Program/School Director and representative from the Dean's Office to discuss the implications of the leave of absence and a revised program of study, if applicable. Typically, a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. Periods of non-enrollment do not count towards the maximum allotted time for completion of academic programs.

### **Professional Conduct**

Students are expected to emulate the legal, moral, and ethical standards expected of professionals and display behavior that is consistent with these qualities. A Code of Responsibilities and Rights of the Students of Midwestern University is included in Appendix 1 of the MWU Student Handbook. This code clearly states the mode of behavior that is expected of students and covers both on-campus and off-campus activities. Students are expected to read and follow this code.

Unsatisfactory professional behavior, as defined in Appendices 2 and 4 of the MWU Student Handbook, is subject to disciplinary sanctions that may preclude a student's academic progress in their program of study. The Dean of Students investigates formal complaints concerning student misconduct and recommends disciplinary action to the CHS Dean. A student who is found to have engaged in improper conduct is subject to disciplinary action which includes, but is not limited to, disciplinary warning/probation, temporary suspension, or dismissal. Disciplinary warning and probation are not noted on the transcript but are kept in the student's disciplinary file. Suspension and dismissal as a result of disciplinary action are noted on the student's transcript. Disciplinary information may be shared with clinical sites that are affiliated with Midwestern University educational programs.

### **Transfer Policy (Intercampus)**

Students are expected to complete their degree requirements at the campus to which they originally matriculated. Transfer between campuses is permitted only under extenuating and specific circumstances for enrolled students that are in good academic standing. Students should consult first with the Program Director and then with the Office of the Dean to discuss the process.

# PHYSICIAN ASSISTANT PROGRAM

## MISSION

The mission of the Midwestern University Physician Assistant (PA) Program is to develop competent and compassionate physician assistants who will make meaningful contributions to their patients, community, and profession.

The goals of the Midwestern University PA Program are to: 1) provide a rigorous academic and clinical curriculum and achieve first-time PANCE percentage pass rates above the national average, 2) cultivate an environment of professionalism to encourage the development of competent and compassionate providers, 3) prepare students to serve diverse populations in both primary care and specialty settings, and 4) demonstrate the application of evidence-based medicine and foster a continuous commitment to lifelong learning and community involvement as a health care provider.

## ACCREDITATION

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted **Accreditation-Continued** to the **Midwestern University-Downers Grove Physician Assistant Program** sponsored by **Midwestern University**. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA *Standards*.

Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the *Standards*. The approximate date for the next validation review of the program by the ARC-PA will be **March 2023**. The review date is contingent upon continued compliance with the *Standards* and ARC-PA policy.

## DEGREE DESCRIPTION

The professional curriculum leads to a Master of Medical Science in Physician Assistant Studies. This full-time 27-month professional program offers students the opportunity to earn a graduate degree and satisfy the eligibility requirements for the PA national certifying examination. The maximum allotted time for completion of this program is 40.5 months.

The roles and specific clinical duties and responsibilities that graduates can expect to experience will likely vary depending on their chosen career path. PA Program graduates are expected to have the ability to competently perform patient histories and physicals, gather pertinent patient data, order and interpret diagnostic studies, recognize common diseases and disorders, choose appropriate therapeutic modalities, perform surgical procedures, manage emergency life-threatening conditions, promote health through counseling, education, and disease prevention, and demonstrate interpersonal skills consistent with the physician assistant role.

The didactic coursework includes 12 months of basic science coursework in anatomy, biochemistry, neuroscience, physiology, pharmacology, immunology, genetics, and microbiology. It also includes clinical coursework in clinical medicine, behavioral medicine, professional issues, and interpretation of the medical literature. During the remaining 15 months, students are required to rotate through eight core clinical rotations and two elective clinical rotations, in addition to completing advanced clinical medicine courses and a capstone project.

The second-year clinical program is primarily delivered at affiliated clinical sites and facilities within the Chicago metropolitan area. These sites are geographically and demographically diverse, reflecting the broad scope of practice opportunities that exist for PAs in the healthcare delivery system of this country. Sites include ambulatory practice settings, small and large office-based group practices, community health centers, in-patient settings involving large and small hospitals as well as federal and state facilities. These sites are in urban, suburban, and rural communities. In addition, the program has established formal affiliations with clinical facilities and practitioners in a number of other states. As part of the clinical education phase of the program, students enrolled in the PA Program will likely be assigned to clinical rotations that reflect the geographic and demographic diversity described above, including out-of-state rotations. Subsidized housing may be provided for out-of-state and distant core clinical rotations. Students are expected to secure their own housing for local and elective rotations, and must provide their own transportation to all core and elective clinical rotations regardless of location.

The PA Program does not offer an extended course of study beyond the usual length of the program.

The PA Program does not grant advanced placement credit for any previously completed coursework.

The Program does not accept students who transfer from another Physician Assistant Program.

## ADMISSIONS

The Midwestern University PA Program considers applicants who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. The admissions environment is highly selective with approximately 1,400 applications received each year for 86 seats. The application deadline is October 1, 2020, however, the PA Program uses a rolling admissions process in which applicants are continuously accepted until all seats are filled, so applicants are encouraged to apply early.

Completed applications received on or before the application deadline are reviewed to determine applicant eligibility for interviews. The following criteria are used to select the most qualified candidates: science and cumulative grade point averages (GPA), rigor of undergraduate and prerequisite courses, Graduate Record Examination (GRE) general test scores, letters of recommendation, healthcare experience, knowledge of the profession, and motivation for a career as a PA. Competitive candidates are typically invited to campus for interviews during the months of August through January.

### Admission Requirements

Students seeking admission to the PA Program must submit the following documented evidence:

1. Minimum cumulative science and overall GPAs of 3.00 on a 4.00 scale.
2. GRE scores from the general test using the Midwestern University institution code 1769.
  - The test must have been taken no earlier than January 1, 2016.
  - Test scores must be received by the Office of Admissions no later than December 1, 2020. Scores must be sent directly from ETS to the MWU Office of Admissions.
  - Competitive applicants achieve a score at or above the 50th percentile in each section. If an applicant has attempted the GRE examination on more than one occasion, the most recent GRE scores will be utilized in the review of the applicant's file.
  - For additional information about the GRE, contact ETS at 866/473-4373 or visit [www.ets.org/gre](http://www.ets.org/gre).
3. Completion of prerequisite courses as listed below from regionally accredited colleges or universities.
  - All prerequisite courses must be completed with a grade of a C or better.
  - Grades of C- are NOT acceptable for any prerequisite courses.
  - If advanced placement (AP) credit has been granted by an outside institution, this credit will automatically be considered for the following prerequisite courses: Math, Statistics, English Composition, and Social and Behavioral Science courses.
  - For AP credit earned in Biology and Chemistry, MWU may request the submission of appropriate documentation (as determined by MWU) to verify the AP credit earned meets the program's admission standards.
  - Life experience credits do not count toward fulfillment of any prerequisite courses.
  - Courses in which grades of "pass" are earned will be counted only when applicants can provide verification that the earned grades are equivalent to grades of C or better (grades of C- are not acceptable).
4. Completion of prerequisite courses by December 31st of the year which precedes the year of anticipated matriculation.
  - No exceptions will be made.
  - Applicants must determine which prerequisites are missing and which courses must be taken to fulfill any outstanding prerequisites.
  - Students invited to interview must show documentation on the day of their visit that they are enrolled in or registered for any outstanding prerequisites.
5. Completion of a bachelor's degree from a regionally accredited college or university before matriculation.
6. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences.
7. Demonstration of service and leadership through community service or extracurricular activities.
8. Oral and written communication skills necessary to interact with patients and colleagues.
9. Passage of Midwestern University criminal background check.
10. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
11. Successful completion of tuberculosis screening and all required immunizations prior to matriculation.

### Prerequisite Courses

*Biology with lab	4 Sem/6 Qtr hours
*Anatomy	4 Sem/6 Qtr hours
*General Chemistry with lab	8 Sem/12 Qtr hours
*Organic Chemistry with lab	4 Sem/6 Qtr hours
Math (college algebra or above)	3 Sem/4 Qtr hours
Statistics	3 Sem/4 Qtr hours
**English Composition	6 Sem/9 Qtr hours
Social and Behavioral Sciences (Sociology, Psychology, or Anthropology, etc.)	6 Sem/9 Qtr hours

\*All science prerequisites must be courses designed for science majors. No survey courses will fulfill science prerequisites. Courses with an online laboratory component will not meet any biology or chemistry prerequisite. In addition, advanced placement credit received at the undergraduate level may not satisfy biology or chemistry prerequisites. For advanced placement (AP) credit earned in biology and chemistry, MWU may request the submission of appropriate documentation (as determined by MWU) to verify the AP credit earned meets the program's admission standards.

\*\*Courses accepted for the English Composition prerequisite include rhetoric, composition, technical writing, and courses designated as writing intensive by the institution.

### Application Process and Deadlines

#### 1. CASPA Application

Completed applications with all required materials must be submitted to the Centralized Application Service for Physician Assistants (CASPA) at [www.caspaonline.org](http://www.caspaonline.org) by **October 1, 2020**. Please refer to the CASPA application instructions for specific details about completing the application, required documents, and processing time. CASPA applications are available beginning in April of the academic year preceding the year in which the applicant plans to matriculate. Due to the large number of applications and the limited number of seats available, applicants are strongly encouraged to complete their CASPA application early in the cycle. Completed applications are reviewed continuously throughout the admissions cycle.

#### 2. Letters of Recommendation

Applicants are required to submit two letters of recommendation from professionals to CASPA ([www.caspaonline.org](http://www.caspaonline.org)). The Office of Admissions will only accept letters of recommendation received directly from CASPA. It is preferred that one letter is written by a science professor who has actually taught the student or a pre-health advisory committee. The second letter may be written by any

one of the following: a pre-health advisory committee, a pre-health advisor, college professor, or a healthcare professional (preferably a PA) who is well-acquainted with the applicant's academic and professional qualifications. Please refer to the CASPA application instructions for specific guidelines and requirements for submitting letters of recommendation.

#### 3. GRE Scores

Applicants are required to submit official GRE general test scores to Northwestern University. The MWU institutional code for submitting scores is 1769. Only test scores earned during the previous five years, no earlier than January 1, 2016 and sent directly from the Educational Testing Service (ETS) to the Office of Admissions are acceptable. Test scores must be received by the MWU Office of Admissions no later than December 1, 2020.

#### 4. Completed Applications

The Office of Admissions will send letters verifying receipt of completed CASPA applications with all required materials to applicants who meet the minimum overall and science GPA requirement of 3.00. Letters will also include instructions on tracking application status online. Applicants must track the receipt of their application materials to ensure the submission of all required documents. Only applicants who submit all required application materials by the published deadlines will be considered for acceptance into the program.

*Please Note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address. All requests for application withdrawal must be made in writing via e-mail, fax, or letter to the Office of Admissions:

Midwestern University  
Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
630/515-7200 or 800/458-6253  
Fax: 630/971-6086  
[admissil@midwestern.edu](mailto:admissil@midwestern.edu)

#### Interview and Selection Process

Completed applications are reviewed to determine which applicants merit invitations for on-campus interviews. The following criteria are used to select the most qualified candidates for interview invitations: science and cumulative grade point averages (GPA), rigor of undergraduate and prerequisite courses, Graduate Record Examination (GRE) general test scores, letters of recommendation, healthcare experience, knowledge of the profession, and motivation for a career as a PA. Interviews are typically scheduled during the months of August through January. Applicants selected to interview will be notified by e-mail or telephone of available

dates. Interviews are required before final admissions decisions are made.

At the time of application, students enrolled in another Midwestern University program are guaranteed an admission interview with the Physician Assistant Program if they meet the requirements outlined in the Articulation Agreement Between Midwestern University Programs of this catalog.

Applicants who have been invited to participate in a required on-campus interview will be evaluated on verbal communication skills, understanding of the profession, commitment to patient care, and/or other elements as determined by the program. The interview day will also provide applicants with an opportunity to learn more about the Physician Assistant program, financial aid programs, and student services. A campus tour and lunch will be provided.

The PA Admissions Committee reviews the complete applications of candidates who were interviewed and then submits recommendations to the Program Director for action. The CHS Dean, via the Office of Admissions, then notifies applicants in writing of admissions decisions. All applicants with complete applications will receive notification in writing regarding their status by the end of March.

*Please Note:* Applicants who interview before December 31 are required to bring documentation verifying any outstanding coursework in progress (by providing a copy of a class schedule or a transcript listing the coursework). Applicants must submit documentation of satisfactory completion of prerequisites no later than the December 31st deadline. Applicants who fail to submit this proof by the designated date will not be considered for admission into the Program.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) intellectual, conceptual, integrative, and quantitative; and 5) behavioral and social. Technological compensation can be made for some limitation in certain of these areas, but candidates should be able to perform in a reasonably independent manner.

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses. The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to

complete the curricular requirements to individually complete physical examination of a patient/client.

2. **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively in both oral and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 lbs.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the consistent, prompt, completion of all responsibilities and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including intra- and extra- oral examinations. These activities will take place in large and small group settings as directed in the College's and/or Program's curricular requirements.

Candidates are required to verify that they understand and meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotions Committee.

### Reapplication Process

After receiving either a denial or an end-of-cycle letter, prospective students may reapply for the following year's admissions cycle. Before reapplying, however, individuals contemplating reapplication should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit new applications through CASPA and proceed through the standard application process.

## GRADUATION REQUIREMENTS

To qualify for the Master of Medical Science in Physician Assistant Studies (MMS) degree, students must:

1. Follow an approved course of study leading to the completion of all master's requirements;
2. Satisfactorily complete all professional courses and clinical rotations with a minimum cumulative grade point average of 2.750 and have no individual course or rotation grade below a "C" or "Pass";
3. Demonstrate professionalism throughout the didactic and clinical phases of training;
4. Satisfactorily complete the Summative Examinations;
5. Satisfactorily complete the required 146 credit hours in the overall course of study;
6. Receive a favorable recommendation for master's degree conferral from the PA Program Student Academic Review Committee and the CHS Student Promotion and Graduation Committee;
7. Be recommended for conferral of the master's degree by the University Faculty Senate;
8. Settle all financial accounts with the University; and
9. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## CERTIFICATION/LICENSURE REQUIREMENTS

To practice as a physician assistant in the United States, students must successfully complete a PA program accredited by the ARC-PA. Students must also pass the certifying examination administered by the National Commission on Certification of Physician Assistants (NCCPA).

For further information regarding the certifying examination, contact the National Commission on Certification of Physician Assistants, Inc., 12000 Findley Road, Suite 100, Johns Creek, GA 30097-1409; 678/417-8100; [www.nccpa.net](http://www.nccpa.net)

Midwestern University's Downers Grove Physician Assistant program meets the educational requirements for certification and licensure to practice as a physician assistant in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## CURRICULUM

The MWU CHS Physician Assistant Program reserves the right to alter its curriculum however and whenever it deems appropriate.

Total Quarter Credits in the Professional Program: 146

### First Professional Year:

Total Quarter Credit Hours Required: 77

#### Summer Quarter

ANATD	0500	Human Gross Anatomy and Embryology	7
BIOCD	0551	Human Biochemistry	3
BIOCD	0552	Clinical Biochemistry and Nutrition	3
PASSD	0511	Professional Seminar I	1
PASSD	0518	Clinical Medicine I	5

**Total** 19

#### Fall Quarter

ANATD	0565	Human Neurosciences	4
CORED	1599C	Interprofessional Education I	1
PASSD	0519	Clinical Medicine II	5
PASSD	0564	Physical Diagnosis	3
PHARD	0584	Pharmacology I	3

PHYSD	0510	Human Physiology I	3.5
<b>Total</b>			<b>19.5</b>
<b>Winter Quarter</b>			
MICRD	0576	Immunology	2
PASSD	0503	Clinical Medicine III	6
PASSD	0529	Research Seminar	3
PASSD	0541	Psychiatric Principles	2
PHARD	0585	Pharmacology II	3
PHYSD	0511	Human Physiology II	3.5
<b>Total</b>			<b>19.5</b>
<b>Spring Quarter</b>			
BIOCD	0581	Human Genetics	1
MICRD	0582	Infectious Diseases	4
PASSD	0504	Clinical Medicine IV	6
PASSD	0512	Professional Seminar II	2
PASSD	0521	Introduction to Capstone Project	1
PASSD	0528	Advanced Patient Assessment and Management	2
PHARD	0586	Pharmacology III	3
<b>Total</b>			<b>19</b>
<b>Second Professional Year:</b>			
Total Quarter Credit Hours Required:			56
<b>Clinical Block (Summer-Spring Quarters)</b>			
PASSD	0641	Internal Medicine Rotation	6
PASSD	0642	Behavioral Medicine Rotation	6
PASSD	0643	General Surgery Rotation	6
PASSD	0644	Emergency Medicine Rotation	6
PASSD	0645	Family Medicine Rotation	6
PASSD	0647	Women's Health Rotation	6
PASSD	0648	Pediatric Medicine Rotation	6
PASSD	0649	General Clinical Medicine Rotation	6
PASSD	0681	Advanced Clinical Medicine I (summer quarter)	3
PASSD	0671	Independent Study in Capstone Project I (fall quarter)	0.5

PASSD	0672	Independent Study in Capstone Project II (winter quarter)	0.5
PASSD	0682	Advanced Clinical Medicine II (winter quarter)	3
PASSD	0674	Independent Study in Capstone Project III (spring quarter)	1
<b>Total</b>			<b>56</b>
<b>Third Professional Year:</b>			
Total Quarter Credit Hours Required:			13
<b>Summer Quarter</b>			
PASSD	0749	Elective I Rotation	4
PASSD	0750	Elective II Rotation	4
PASSD	0775	Independent Study in Capstone Project IV	1
PASSD	0783	Advanced Clinical Medicine III	4
<b>Total</b>			<b>13</b>

## COURSE DESCRIPTIONS

*ANATD 0500 Human Gross Anatomy and Embryology*  
 This course presents lectures and cadaver dissection laboratories emphasizing the normal structure of the human body; the embryologic basis of adult anatomy; the relationship between structure and function; and the use of human gross anatomy in physical diagnosis.  
 7 credits

*ANATD 0565 Human Neurosciences*  
 This is an integrated, interdisciplinary course in which students learn to identify and describe the basic structural components and corresponding functions of the human nervous system. Emphasis is given to correlating underlying lesions involving these structures with neurologic deficits and dysfunctions likely to be encountered in clinical practice. Integrated lectures are given by faculty in the Departments of Anatomy and Physiology, and the Speech Language Pathology Program.  
 4 credits

*BIOCD 0551 Human Biochemistry*  
 This course provides a foundation for basic science courses concerned with normal and pathologic human physiology, biochemistry, cytology, histology, pharmacology, and nutrition. Topics include cellular energy metabolism, signal transduction, neurotransmitter synthesis and degradation, cellular energetics, foundations of molecular biology, nutrition, and metabolism in differentiated tissues and

organs.  
3 credits

*BIOCD 0552 Clinical Biochemistry and Nutrition*

The objective of this course is to equip the physician assistant with the knowledge needed to apply nutritional principles to preventive medicine and various common pathologies. Additional topics include clinical problem solving skills, statistics in clinical decision making, blood clotting, the role of nutrition in different anemias, diabetes mellitus, the hyperlipidemias, and factors affecting blood chemistries.  
3 credits

*BIOCD 0581 Human Genetics*

This course is devoted to introducing the foundations of human genetics. Topics include normal transmission of dominant and recessive genetic traits, sex-linked/autosomal-linked inheritance, common genetic defects and diseases, inheritance patterns and probabilities, genetic mapping, common risk factors in inherited/acquired genetic diseases, family counseling, and family planning issues.  
1 credit

*CORED 1599C Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease.  
1 credit

*MICRD 0582 Infectious Diseases*

This didactic course covers infectious diseases, their etiologic agents, differential diagnoses and disease management. Through the use of diagnostic algorithms and integrative self-studies, students learn problem-solving skills. The course includes hands-on experiential laboratory sessions which augment didactic material and provide insight into clinical microbiological laboratory procedures and an evidence-based approach to diagnoses in the infectious diseases context.  
4 credits

*MICRD 0576 Immunology*

This didactic course introduces students to the fundamental principles of immunology and host defense mechanisms and considers them in relation to defense against common viral, bacterial, fungal, and parasitic agents of disease, immunologic abnormalities, immune-deficiency disorders, immunoprophylaxis, and therapy.  
2 credits

*PASSD 0518 Clinical Medicine I*

Medical interviewing skills will be introduced through formal lectures and developed through standardized patient interviews. The skills, knowledge, and sensitivity needed to communicate and improve patient rapport in a variety of psychosocial situations will be discussed. A systems-oriented approach will introduce common diseases across the life-span, their underlying pathophysiology (including symptoms and signs), patient evaluation (history, physical examination and diagnostic studies), differential diagnosis, and basic therapeutic concepts.  
5 credits

*PASSD 0519 Clinical Medicine II*

A systems-oriented approach will introduce common diseases and syndromes across the life-span, their underlying pathophysiology (including symptoms and signs), patient evaluation (history, physical examination, and diagnostic studies), differential diagnosis, and basic therapeutic concepts. Acute exacerbations of chronic diseases and emergency care will be integrated as appropriate. Formal lectures and interactive case-based lecture techniques will be utilized.  
5 credits

*PASSD 0503 Clinical Medicine III*

A systems-oriented approach will introduce common diseases and syndromes across the life-span, their underlying pathophysiology (including symptoms and signs), patient evaluation (history, physical examination, and diagnostic studies), differential diagnosis, and basic therapeutic concepts. Acute exacerbations of chronic diseases and emergency care will be integrated as appropriate. Formal lectures, interactive case-based lectures and case group discussion techniques will be utilized.  
6 credits

*PASSD 0504 Clinical Medicine IV*

A systems-oriented approach will introduce common diseases and syndromes across the life-span, their underlying pathophysiology (including symptoms and signs), patient evaluation (history, physical examination, and diagnostic studies), differential diagnosis, and basic therapeutic concepts. Acute exacerbations of chronic diseases and emergency care will be integrated as appropriate. Formal lectures, interactive case-based lectures and case group discussion techniques will be utilized.  
6 credits

*PASSD 0511 Professional Seminar I*

This course presents and discusses the clinical practice, role, and responsibilities of physician assistants. Professional behavior, cultural and social awareness, basic concepts for quality healthcare delivery and the future of the physician



assistant profession will be discussed. The interaction of healthcare providers within various clinical settings will also be examined.

1 credit

*PASSD 0512 Professional Seminar II*

This course expands on the professional role of the physician assistant. Ethical issues that arise during the provision of healthcare services will be discussed. In addition, medicolegal aspects of healthcare and preparation for clinical practice will be reviewed.

2 credits

*PASSD 0521 Introduction to Capstone Project*

This course is designed to help the student create the conceptual framework and medical literature review that will lead to the development of the Capstone Project. Students will research a medical topic of interest to them and begin to develop the foundation needed for developing their Capstone Project.

1 credit

*PASSD 0529 Research Seminar*

This course is designed to provide an overview of the scientific method including quantitative and qualitative analyses, research techniques and research design methods. Elementary statistical techniques will be reviewed including an introduction to probability, measurement theory, correlation, regression analysis, sampling, significance tests and statistical inference. Active learning opportunities to foster the development of skills to implement evidence-based medicine principles in Physician Assistant practice will be utilized.

3 credits

*PASSD 0528 Advanced Patient Assessment and Management*

This course is designed to allow the physician assistant student to obtain the knowledge and skills required to assess a patient's medical and health status as part of the focused adult history and problem-oriented physical examination. Students will also develop patient-management skills by ordering and interpreting laboratory and diagnostic studies and appropriate therapeutics. The course is designed to build upon the medical history knowledge gained in Clinical Medicine I and the screening adult physical exam skills learned in Physical Diagnosis.

2 credits

*PASSD 0541 Psychiatric Principles*

This course presents the concepts and practices related to a review of the symptoms, signs, diagnosis and management of psychiatric conditions across the lifespan.

2 credits

*PASSD 0564 Physical Diagnosis*

Physical examination techniques will be introduced during formal lectures and practiced during partner-paired laboratory sessions in this course. Normal physical findings and examination techniques will be emphasized. Common normal variants and classic physical abnormalities will be introduced and discussed. Lectures, laboratory sessions, and interactive case-based lecture techniques will be employed.

3 credits

*PASSD 0641 Internal Medicine Rotation*

Six-week clinical rotation in an Internal Medicine setting.

6 credits

*PASSD 0642 Behavioral Medicine Rotation*

Six-week clinical rotation in a Behavioral Medicine setting.

6 credits

*PASSD 0643 General Surgery Rotation*

Six-week clinical rotation in a General Surgery setting.

6 credits

*PASSD 0644 Emergency Medicine Rotation*

Six-week clinical rotation in an Emergency Medicine setting.

6 credits

*PASSD 0645 Family Medicine Rotation*

Six-week clinical rotation in a Family Medicine setting.

6 credits

*PASSD 0647 Women's Health Rotation*

Six-week clinical rotation in an Obstetrics/Gynecology setting.

6 credits

*PASSD 0648 Pediatric Medicine Rotation*

Six-week clinical rotation in a Pediatric Medicine setting.

6 credits

*PASSD 0649 General Clinical Medicine Rotation*

Six-week clinical rotation in a General Clinical Medicine setting.

6 credits

*PASSD 0671 Independent Study in Capstone Project I (fall quarter)*

This course is designed to facilitate the completion of an independent medical research project as the culmination of the master's degree for the physician assistant student. The project entails scholarly inquiry into a clinical medicine topic and application of evidence-based medicine techniques to facilitate completion of the required components of the Capstone Project.

0.5 credits

*PASSD 0672 Independent Study in Capstone Project II (winter quarter)*

This course is designed to facilitate the completion of an independent medical research project as the culmination of the master's degree for the physician assistant student. The project entails scholarly inquiry into a clinical medicine topic and application of evidence-based medicine techniques to facilitate completion of the required components of the Capstone Project.

0.5 credits

*PASSD 0674 Independent Study in Capstone Project III (spring quarter)*

This course is designed to facilitate the completion of an independent medical research project as the culmination of the master's degree for the physician assistant student. The project entails scholarly inquiry into a clinical medicine topic and application of evidence-based medicine techniques to facilitate completion of the required components of the Capstone Project.

1 credit

*PASSD 0681 Advanced Clinical Medicine I (summer quarter)*

This course is designed to build upon the student's foundation of clinical medicine knowledge and to prepare the student to begin clinical year rotations. Lectures will provide advanced information and instruction covering a range of medical topics including interpretation of electrocardiograms, basic life support and advanced cardiovascular life support, and topics that will facilitate the student's continuing development of knowledge and therapeutic skills in patient assessment, medical decision-making, and clinical management.

3 credits

*PASSD 0682 Advanced Clinical Medicine II (winter quarter)*

This course is designed to build upon the student's foundation of clinical medicine knowledge and to continue to develop critical thinking and medical decision making skills. Lectures will provide advanced information and instruction covering a range of medical topics.

3 credits

*PASSD 0749 Elective I Rotation*

Four-week clinical rotation in a discipline of the student's choosing (subject to approval by the Program).

4 credits

*PASSD 0750 Elective II Rotation*

Four-week clinical rotation in a discipline of the student's choosing (subject to approval by the Program).

4 credits

*PASSD 0775 Independent Study in Capstone Project IV*

This course is designed to facilitate the completion of an independent medical research project as the culmination of the master's degree for the physician assistant student. The project entails scholarly inquiry into a clinical medicine topic and application of evidence-based medicine techniques to facilitate completion of the required components of the Capstone Project.

1 credit

*PASSD 0783 Advanced Clinical Medicine III*

This course is designed to focus on professional issues in preparation for graduation and clinical practice. In addition, students will receive an intensive week of lecture topics to help them prepare for the Physician Assistant National Certifying Examination (PANCE).

4 credits

*PHARD 0584, 0585, 0586 Pharmacology I, II, III*

This course sequence introduces students to the general principles of drug action and the therapeutic uses and toxicities of drugs commonly used in humans. A drug's action is considered on an organ-system basis. Specific topics include drugs acting on the: autonomic and central nervous systems, cardiovascular and renal systems, gastrointestinal and genitourinary systems. In addition, discussions on chemotherapy of microbial and parasitic organisms, chemotherapy of neoplastic diseases, drugs acting on blood-forming organs, and hormones are presented. The course also includes discussions of environmental toxic agents and antidotes.

Each course 3 credits

*PHYSD 0510, 0511 Human Physiology I, II*

Students are introduced to the physiological principles and regulatory processes that underlie the normal function of the human body, and develop an understanding of the physiologic responses to perturbations of homeostasis and of pathophysiologic alterations that occur in disease. Didactic lectures are supplemented with workshops that focus on application of physiological concepts. Topics include the properties of excitable cells and the function of the neuromuscular, cardiovascular, pulmonary, renal, digestive, endocrine and reproductive systems.

Each course 3.5 credits

## STUDENT ACADEMIC POLICIES

### Academic Progress

The academic standing of a student is determined by the student's cumulative grade point average. To progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

## FACULTY

### **James F. Gunn, M.M.S., PA-C**

Midwestern University  
College of Health Sciences  
Program Director and Associate Professor

### **Patricia Higgins, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Director of Clinical Education and Associate Professor

### **Kristy L. Luciano, M.S., PA-C**

Midwestern University  
College of Health Sciences  
Director of Didactic Education and Assistant Professor

### **Erica L. Menocci, M.M.S., PA-C**

Midwestern University  
College of Health Sciences  
Instructor

### **Sandhya Noronha, M.D.**

University of Illinois at Chicago  
College of Medicine  
Associate Professor

### **Daniel Provencher, M.S., PA-C**

Midwestern University  
College of Health Sciences  
Director of Clinical Education and Assistant Professor

### **Lendell Richardson, M.D.**

Loyola University of Chicago  
Stritch School of Medicine  
Medical Director and Associate Professor

### **Kara Roman, M.M.S., PA-C**

Midwestern University  
College of Health Sciences  
Associate Program Director and Assistant Professor

### **Alyson L. Smith, M.S., PA-C**

Rosalind Franklin University of Medicine and Science  
College of Health Professions  
Associate Professor

### **Lauren Trillo, M.M.S., PA-C**

Nova Southeastern University  
College of Health Care Sciences  
Instructor

# PHYSICAL THERAPY PROGRAM

## MISSION

The mission of the Midwestern University Physical Therapy Program is to educate students, using the highest standards of academic excellence, to become physical therapists who practice across the healthcare continuum, making meaningful contributions to their patients, community, and profession.

## VISION

The Midwestern University Physical Therapy Program will provide an environment which supports students and faculty to:

- Promote and optimize movement and function
- Maximize activity and participation of individuals
- Promote health and wellness
- Maintain an ethical framework for practice
- Support professional development of students, staff and faculty
- Acquire, appraise and apply current, best basic science, applied science and professional knowledge for making practice decisions
- Engage in scholarly activity and disseminate scholarly products
- Embrace cultural and social diversity in the academic community, healthcare community, and community-at-large
- Practice as collaborative members of the health community

## ACCREDITATION

The Physical Therapy Program at Midwestern University, Downers Grove, IL is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 N. Fairfax St., Alexandria, Virginia 22314; telephone: 703-706-3245; e-mail: [accreditation@apta.org](mailto:accreditation@apta.org); website: <http://www.capteonline.org> If needing to contact the program/institution directly, please call (630)515-6462 or e-mail [gwozni@midwestern.edu](mailto:gwozni@midwestern.edu).

Midwestern University is also accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413. 800/621-7440.

## DEGREE DESCRIPTION

Midwestern University's Physical Therapy Program offers a course of study leading to the Doctor of Physical Therapy (D.P.T.) degree for qualified students. The full-time, continuous, 34-month, entry-level Doctor of Physical Therapy curriculum is designed to deliver the academic and clinical education required to prepare students for their professional role as key members of the healthcare team and as an integral part of the healthcare delivery system. The general education, professional training, experience, and personal character development of physical therapists uniquely prepare them to coordinate care related to improvement of functional ability.

The focus of the professional clinical doctorate degree program is the preparation of entry-level, generalist physical therapists who are able to provide competent, skilled professional services in a wide range of community and institutional practice settings that require independent judgment and self-sufficiency.

The Doctor of Physical Therapy Program prepares entry-level practitioners to provide physical therapy services in large, small, traditional, and nontraditional community and institutional practice settings that require independent judgment, leadership, and autonomous practice. The program also provides the foundation for graduates to identify and contribute to effecting solutions to the major, emergent health issues of our society and to contribute to the academic and clinical education of future practitioners. The graduate will be prepared to make valuable, ongoing contributions to society, healthcare, and the profession through leadership activities and collaborative efforts with others in physical therapy and professional education, practice, and research.

## Physical Therapy Program Goals and Expected Program Outcomes

1. Graduates will practice independent competent physical therapy
  - Graduates will demonstrate the knowledge, skills, and abilities required for independent, competent physical therapy practice.
  - Graduates will demonstrate appropriate professional behavior.
2. Students/graduates will contribute to and advocate for the health and wellness of society through education, consultation, and community outreach.
  - All students will develop, implement, and analyze a community outreach wellness program.
  - All students will utilize current best evidence to develop age-appropriate fitness prescriptions which can be used for education and consultation in the community.
3. Graduates will access, utilize and contribute to the scientific literature for clinical decision-making.
  - Graduates will demonstrate the ability to access the scientific literature for clinical decision-making.
  - Graduates will demonstrate the ability to utilize scientific literature for clinical decision-making.
  - Graduates will demonstrate the ability to contribute to the scientific literature for clinical decision-making.
4. Faculty members will be engaged in teaching, scholarship, and service.
  - Faculty will provide high quality teaching.
  - Faculty will disseminate scholarly products on a regular basis.
  - Faculty will provide service to the University and the profession.
5. The Midwestern University Physical Therapy Program will deliver an accredited, entry-level physical therapist education program which embraces the core values of the profession.
  - The Midwestern University Physical Therapy Program will maintain accreditation.
  - The Midwestern University Physical Therapy Program provides a comprehensive curriculum in Physical Therapy Education.
  - The American Physical Therapy Association's Core Values content exists throughout the Midwestern University Physical Therapy Program curriculum.

## Time Limit for Completion of Coursework

The maximum allotted time for completion of the program is 52 months.

## ADMISSIONS

The College of Health Sciences Physical Therapy Program considers for admission those students who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. To select these candidates, a competitive admissions framework has been established. Within this competitive admissions framework, multiple criteria are used to select the most qualified candidates from an applicant pool that exceeds the number of seats available.

The Midwestern University Physical Therapy Program uses the Centralized Application Service for Physical Therapy Schools (PTCAS) for students applying to the Program. All applicants to the Physical Therapy Program are required to submit their applications to PTCAS (<http://www.ptcas.org>) with all required materials by December 15, 2020. Please refer to the PTCAS website for instructions on submission of PTCAS application materials.

The Physical Therapy program operates on a rolling admissions basis in which completed applications are reviewed throughout the admissions cycle to determine applicant eligibility for interviews. Interviews are typically conducted during the winter and spring. Admission decisions are generally made within one month of the interview.

### Admission Requirements

Students seeking admission to the Physical Therapy Program must submit the following documented evidence:

1. Completion of a bachelor's degree from a regionally accredited college or university
2. Minimum cumulative grade point average (GPA) of 3.0 and a minimum science GPA of 2.9 on a 4.0 scale
3. Completion of prerequisite courses totaling 46 semester/66 quarter credits as listed from regionally accredited colleges or universities
  - Grades of "C" or better (grades of "C-" are NOT acceptable) are required in each course
4. Graduate Record Examination (GRE) general test scores using the Midwestern University institution code of 1769
  - The test must have been taken no earlier than January 1, 2016.
  - For more information about the GRE, contact Educational Testing Services (ETS) at 866/473-4373 or visit [www.ets.org/gre](http://www.ets.org/gre)

5. Demonstration of a people or service orientation through community service or extracurricular activities
6. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences
7. Oral and written communication skills necessary to interact with patients and colleagues
8. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy
9. Passage of the Midwestern University criminal background check

### Prerequisite Courses

<i>Science Courses:</i>	
Biology with lab	4 Semester/6 Quarter hours
Human/Vertebrate Anatomy with lab	3 Semester/4 Quarter hours
Human/Vertebrate Physiology	3 Semester/4 Quarter hours
General Chemistry with lab	4 Semester/6 Quarter hours
General Physics with lab	8 Semester/12 Quarter hours
<i>General Courses:</i>	
Math (college algebra or above)	3 Semester/4 Quarter hours
Statistics (should include inferential statistics)	3 Semester/4 Quarter hours
English—must include at least one composition course (oral communication/public speaking is recommended)	9 Semester/13 Quarter hours
Social & Behavioral Sciences (at least one course in psychology)	9 Semester/13 Quarter hours

### Application Process and Deadlines

#### 1. PTCAS Application

Applicants are required to submit their applications to PTCAS at <http://www.ptcas.org> by December 15, 2020. Please refer to the PTCAS application instructions for specific details about completing the application, required documents, and processing time. The PTCAS application should be available for applicants beginning during the summer months. Due to the large number of applications and the limited number of seats available, applicants are strongly encouraged to complete their PTCAS application early in the cycle. Midwestern University operates on a rolling admissions basis where applications are reviewed throughout the admissions cycle.

#### 2. Letters of Recommendation

Applicants are required to submit a minimum of two letters of recommendation from professionals to PTCAS (<http://www.ptcas.org>). The Office of Admissions will only accept letters of recommendation received directly from PTCAS. It is preferred that one letter is written by a science professor who has actually taught the student or a pre-health advisory committee. The second letter can be written by any one of the following: pre-health advisory committee, pre-health advisor, college professor, or healthcare professional (preferably a physical therapist) who knows the applicant well. The applicant should refer to the PTCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.

#### 3. GRE Scores

Applicants are required to submit official GRE general test scores directly to Midwestern University. The MWU institutional code for submitting scores is 1769. Only test scores earned during the previous five years (no earlier than January 1, 2016) and sent directly from the Educational Testing Service (ETS) will be accepted.

#### 4. Completed Applications

The Office of Admissions will send letters verifying receipt of PTCAS applications with all required materials to all applicants who meet the minimum cumulative science GPA of 2.900 and overall GPA of 3.000. The letters will also include instructions on checking the status of the required application materials online. All applicants must also submit official GRE general test scores to Midwestern University to complete their applications. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit completed applications with all required application materials will be considered for potential entrance into the Program.

*Please Note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via e-mail, fax, or letter to:

Midwestern University  
Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
Phone: 630/515-7200 or 800/458-6253  
Fax: 630/971-6086  
e-mail: [admissil@midwestern.edu](mailto:admissil@midwestern.edu)

### Interview and Selection Process

When applicants are considered eligible for interviews after review of their completed admissions files, they are notified of available interview dates and invited by the Office of Admissions to schedule an on-campus interview.

A typical interview day involves participation in the following activities, which are coordinated by the Office of Admissions: an interview with at least one interviewer, lunch with current Midwestern University students, a campus tour, and an opportunity to meet with an admissions counselor and a representative from the financial aid office.

During interview sessions, the interviewer questions applicants about their academic, personal, and professional aspirations and preparedness for admission to the Program. The interviewer rates prospective students on a standardized evaluation form. These evaluations are included in the applicant files provided to the Physical Therapy Admissions Committee. The Physical Therapy Admissions Committee meets periodically to review the files of applicants who have been interviewed. The committee reviews the full application files for interviewed applicants and then formulates and submits recommendations to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants in writing of admissions decisions.

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses. The candidate must be able to accurately auscultate lung/breath, heart and bowel sounds to complete the curricular requirement to individually complete physical examination of a patient/client.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must

be able to move at least 50 lbs. vertically and horizontally.

4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including manual techniques. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Transfer Policy**

The Physical Therapy Program does not allow transfer students.

### **Dual Acceptance Program-University of Saint Francis**

The Physical Therapy Program has a dual acceptance agreement with the University of Saint Francis, Fort Wayne, IN. Students may inquire about the agreement through the Office of Admissions at the University of Saint Francis or Midwestern University.

### **Reapplication Process**

Students who receive either a denial or an end-of-cycle letter may reapply for the following year's admissions cycle. Individuals contemplating reapplication should seek the advice of an admissions counselor, prior to reapplying.

To initiate the reapplication process, prospective students must complete and submit new applications and proceed through the standard application process.

## **EVALUATION OF STUDENT PERFORMANCE**

Students in the Doctor of Physical Therapy Program are formally evaluated at appropriate intervals during the curriculum to assess and document satisfactory achievement of learning objectives and prescribed competencies. These evaluations occur on a regular basis at scheduled times during each course. Depending on the learning and competency outcomes objectives, these evaluations are designed to assess the level of knowledge, problem solving skills, psychomotor and clinical competencies and behavioral performances of students during each course and/or practicum. Students are graded on a numerical/alphabetical system using a standard grading scale, which is published in the Midwestern University catalog. Students are customarily provided access to grade reports after each examination, summarizing their performance on each test item. Students will be required to participate in competency-based evaluations at various intervals throughout their academic tenure.

Evaluation of clinical skills occurs throughout various stages of the curriculum and includes progressive assessments performed in academic courses using simulated situations and patients, including standardized patients. Evaluations of student performance during the clinical practica will be formal and will use established criteria developed by physical therapy clinical and academic educators.

## **GRADUATION REQUIREMENTS**

University graduation and degree conferral ceremonies are held in the spring of each year for the Physical Therapy Program. To qualify for the Doctor of Physical Therapy (DPT), students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.750;
2. Satisfactorily complete the required minimum of 171.5 quarter credit hours in the curriculum;
3. Receive a favorable recommendation for the degree conferral from the Physical Therapy Academic Review Committee and the CHS Student Promotion and Graduation Committee;
4. Receive a favorable recommendation for the degree conferral from the University Faculty Senate;
5. Settle all financial accounts with the institution; and
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## **LICENSURE REQUIREMENTS**

After graduating from an accredited or approved physical therapist education program, a student must pass a national examination and meet licensure requirements of the state in which they wish to practice. The Midwestern University Physical Therapy Program curriculum has been designed to satisfy the criteria for approved physical therapy programs as stated in the Illinois Physical Therapy Act.

Midwestern University's Doctor of Physical Therapy program meets the educational requirements for licensure to practice as a physical therapist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## **CURRICULUM**

The total number of required quarter credits is 172.5. The first academic year of the professional doctoral curriculum includes four quarters consisting of 65.5 required course credits (quarter hours). The second academic year of the curriculum is composed of four quarters consisting of 52 required course credits, including 520 clock-hours of clinical education. The third academic year of the curriculum is composed of four quarters consisting of 55 required course credits which includes two clinical practica consisting of 800 clock-hours of clinical education. Clinical experiences take place in various facilities located throughout the continental United States that have legal agreements with the University.



The Midwestern University College of Health Sciences Physical Therapy Program reserves the right to alter its curriculum however and whenever it deems appropriate.

Total Quarter Credits in the Professional Program: 172.5

**First Professional Year:**

Total Quarter Credit Hours Required: 65.5

**Summer Quarter**

ANATD	1500	Human Gross Anatomy and Embryology	7
BIOCD	1553	Cell and Tissue Structure and Function	2
PTHED	1503	Clinical Problem Solving I	2
PTHED	1509	Medical Terminology	0.5
PTHED	1511	Biopsychosocial Issues in Healthcare	3
PTHED	1512	Health Professionalism	2
<b>Total</b>			<b>16.5</b>

**Fall Quarter**

CORED	1599D	Interprofessional Education I	1
PHYSD	1510	Human Physiology I	3.5
PTHED	1513	Physical Therapy Roles and Professional Issues I	2
PTHED	1515	Research Design and Methodology	3
PTHED	1552	Health Promotion I	2
PTHED	1577	Physical Therapy Evaluation I	4
PTHED	1582	Kinesiology/Biomechanics I	3
<b>Total</b>			<b>18.5</b>

**Winter Quarter**

PHYSD	1511	Human Physiology II	3.5
PTHED	1514	Education Principles for Physical Therapists	3
PTHED	1521	Preparation for Clinical Education I	1.5
PTHED	1527	Clinical Conditions I	4
PTHED	1565	Physical Therapy Interventions I	2
PTHED	1584	Kinesiology/Biomechanics II	3
<b>Total</b>			<b>17</b>

**Spring Quarter**

PTHED	1532	Human Neuroscience	3
PTHED	1545	Life Span Human Development	3.5
PTHED	1566	Physical Therapy Interventions II	3
PTHED	1578	Physical Therapy Evaluation II	4
<b>Total</b>			<b>13.5</b>

**Second Professional Year:**

Total Quarter Credit Hours Required: 52

**Summer Quarter**

PHYSD	1637	Exercise Physiology	3
PTHED	1628	Clinical Conditions II	3
PTHED	1633	Applied Neuroscience	3
PTHED	1667	Physical Therapy Interventions III	3
PTHED	1685	Practicum I	3
<b>Total</b>			<b>15</b>

**Fall Quarter**

PTHED	1601	Cardiopulmonary Evaluation and Treatment	3
PTHED	1605	Clinical Problem Solving II	2
PTHED	1638	Physical Agents I	3
PTHED	1681	Neurologic Evaluation and Treatment: Adult I	5
<b>Total</b>			<b>13</b>

**Winter Quarter**

PTHED	1602	Essentials of Pharmacology for Physical Therapists	2
PTHED	1608	Orthotics	2
PTHED	1622	Preparation for Clinical Education II	1
PTHED	1639	Physical Agents II	3
PTHED	1682	Neurologic Evaluation and Treatment: Pediatrics	4
<b>Total</b>			<b>12</b>

**Spring Quarter**

PTHED	1607	Scholarly Development in Physical Therapy I	1
PTHED	1686	Practicum II	11
<b>Total</b>			<b>12</b>

**Third Professional Year:**  
Total Quarter Credit Hours Required: 55

**Summer Quarter**

PTHED	1746	Topics in Pediatric Physical Therapy	2
PTHED	1747	Human Anatomy II	3
PTHED	1750	Topics in Physical Therapy Practice	3
PTHED	1751	Management in Physical Therapy Systems	3
PTHED	1781	Neurologic Evaluation and Treatment: Adult II	3
<b>Total</b>			<b>14</b>

**Fall Quarter**

PTHED	1709	Clinical Problem Solving III	2
PTHED	1711	Prosthetics	2
PTHED	1715	Physical Therapy Roles and Professional Issues II	3
PTHED	1752	Applied Management Skills in Physical Therapy Systems	2
PTHED	1753	Health Promotion II	2
PTHED	1770	Advanced Musculoskeletal Evaluation and Treatment	4
<b>Total</b>			<b>15</b>

**Winter Quarter**

PTHED	1787	Practicum III	12
<b>Total</b>			<b>12</b>

**Spring Quarter**

PTHED	1708	Scholarly Development in Physical Therapy II	2
PTHED	1788	Practicum IV	12
<b>Total</b>			<b>14</b>

**Elective Options:**

PTHED	1400	Independent Study in Physical Therapy Practice	2
PTHED	1401	Standardized Measurement and Clinical Problem Solving in Pediatric Physical Therapy	2
PTHED	1403	Clinical Application of Quantitative Gait Data in the Pediatric Population	1

PTHED	1404	Physical Therapy Management of Female Pelvic Floor Function	1
PTHED	1405	Research Elective	2
PTHED	1406	Biomechanical Foundations of Human Movement	2
PTHED	1407	Vestibular Rehabilitation	1

## COURSE DESCRIPTIONS

*ANATD 1500 Human Gross Anatomy and Embryology*

This course presents lectures and cadaver dissection laboratories emphasizing the normal structure of the human body; the embryologic basis of adult anatomy; the relationship between structure and function; and the use of human gross anatomy in physical diagnosis. 7 credits

*BIOCD 1553 Cell and Tissue Structure and Function*

This course provides an introduction to cell and tissue biology and metabolism, focusing on the structure and function of normal human tissue and organs. The student gains a basic science framework to apply to physical therapy intervention. Application of this material helps students understand: 1) growth and development of human cells, tissues, organs and organ systems; 2) functional differences in cells, tissues, organs and organ systems; 3) tissue healing and repair; 4) response of tissue to therapeutic intervention. 2 credits

*CORED 1599D Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease. 1 credit

*PHYSD 1510, 1511 Human Physiology I, II*

Students are introduced to the physiological principles and regulatory processes that underlie the normal function of the human body and develop an understanding of the physiologic responses to perturbations of homeostasis and of pathophysiologic alterations that occur in disease. Didactic lectures are supplemented with workshops that focus on application of physiological concepts. Topics include the properties of excitable cells and the function of the neuromuscular, cardiovascular, pulmonary, renal, digestive,

endocrine and reproductive systems.  
Each course 3.5 credits

*PHYSD 1637 Exercise Physiology*

Physiologic factors relevant to responses and adaptations to exercise across the life span are presented. Analysis of the metabolic, cardiorespiratory, and musculoskeletal systems to prescribe and grade exercise is emphasized. Workshops are utilized to facilitate integration of principles of exercise physiology with clinical practice.

3 credits

*PTHED 1503 Clinical Problem Solving I*

This course introduces theoretical frameworks for clinical problem-solving and develops the student's level of clinical reasoning. Students analyze clinical problems by identifying critical cues, gathering information, developing hypotheses, testing hypotheses, and analyzing results. The concept of evidence-based practice is introduced to students as part of the clinical reasoning process. Accessing, organizing, using, and citing healthcare literature, assessing levels of evidence, and mapping clinical concepts are applied to physical therapist practice.

2 credits

*PTHED 1509 Medical Terminology*

This course provides a basic introduction to medical terminology with a focus on body systems. Students complete 13 online self-study modules that incorporate recognition and assessment of medical terms. Assessment of student learning occurs through a series of 13 self-paced quizzes. This course is required early in the curriculum to facilitate communication in subsequent courses and clinical assignments.

0.5 credits

*PTHED 1511 Biopsychosocial Issues in Healthcare*

This course is designed to introduce the student to 1) the biopsychosocial model of health, introducing the WHO International Classification of Disability, Functioning and Health (ICF) model, and 2) the patient-centered model of healthcare service delivery. Students will explore the basics of the patient-provider relationship, including effective communication, empathy, patient motivation, enhancing patient adherence, and encouraging healthy behaviors. Within the patient-centered care model, special emphasis will be given to working with individuals who have a disability, across the life span. The importance of a family-centered care approach in working with children and consideration of caregiver issues will be addressed.

3 credits

*PTHED 1512 Health Professionalism*

This course provides an introduction to professional behavior, healthcare systems, issues in healthcare delivery, and healthcare team members. The perspective of the patient/client is emphasized. Principles of confidentiality, professional ethics, standards of practice, patient rights, and the Guide to Physical Therapist Practice are discussed.

2 credits

*PTHED 1513 Physical Therapy Roles and Professional Issues I*

This course introduces the multiple roles of the physical therapist across the healthcare delivery system as a patient care provider, educator, supervisor, and culturally competent professional. Implications of these roles for physical therapy practice are discussed. Current issues in physical therapist practice: regulation and healthcare payment, legal and ethical standards, supervision, and standards of practice are analyzed. The role of the physical therapy professional association in on-going professional development is discussed.

2 credits

*PTHED 1514 Education Principles for Physical Therapists*

This course provides the foundation for systematically designing, implementing and evaluating learning experiences used in the education of patients, students, colleagues, community members, and self. Students will gain knowledge in the role of the healthcare professional in education, principles of learning, teaching and learning modules, learning needs, goals setting, writing behavioral objectives, instructional strategies, strategies for group facilitation, patient and family education, and teaching in both the clinical and academic settings.

3 credits

*PTHED 1515 Research Design and Methodology*

This course is a basic introduction to research design and methodology. It is intended to teach students the basic principles of the research process. Topics covered in this course will enable students to critically evaluate papers in clinical and basic science research. This course consists of a shared interprofessional lecture session and a separate workshop session for the PT students. Within the PT Workshop, students will integrate content learned from the main session and apply it to issues pertinent to physical therapy practice.

3 credits

*PTHED 1521 Preparation for Clinical Education I*

This course is the first of two courses in the Preparation for Clinical Education series. In a controlled safe environment with simulated and real-life patients, students practice skills in communication, time management, patient evaluation and intervention, infection control/standard precautions, mobility

training, and patient education. This course provides opportunities to appreciate the perspective of patients/families on changes in health and healthcare delivery. Students are oriented to and plan for Practicum I, a three-week full-time supervised clinical practice in a healthcare environment.

1.5 credits

#### *PTHED 1527 Clinical Conditions I*

This course introduces students to general pathology including environmental and genetic causes of disease as well as molecular, cellular, organ and whole body effects of common disorders. Speakers discuss the diagnosis and medical and surgical management of patients with common disorders seen in physical therapy practice. In addition, the course introduces students to medical imaging theory and application.

4 credits

#### *PTHED 1532 Human Neuroscience*

This course is the first of two neuroscience courses. This course provides students with the ability to identify and describe the principal structural components and corresponding functions of the nervous system, correlate nervous system lesions with neurological deficits/dysfunction seen in clinical practice, correlate neurological examination with structural components, and begin to relate neurophysiology with the theoretical basis for therapeutic approaches.

3 credits

#### *PTHED 1545 Life Span Human Development*

Inter-relationships of physical, psychological, and social development across the life span are examined and related to physical therapy patient management. Development of functional movement and of the body systems supporting movement are analyzed. Standardized motor and functional assessment instruments for specific age groups are reviewed and selected tests administered. Students design wellness/fitness programs for infants, children, adolescents and older adults.

3.5 credits

#### *PTHED 1552 Health Promotion I*

This course will provide a conceptual framework for health promotion and disease/injury prevention which includes an interprofessional model to provide optimal health for people, animal, plant and environmental health. The foundation for the conceptual framework is built on public health policy and basic epidemiological principles. Course content focuses on definitions of health promotion and disease/injury prevention, risk and its relation to disease, assessment of risk, interventions to minimize risk/promote health, constraints to health education programming and compliance issues, health

promotion and disease/injury prevention issues after disability and evaluation of health promotion and disease/injury prevention programs.

2 credits

#### *PTHED 1565 Physical Therapy Interventions I*

This course covers the design, implementation, and modification of basic interventions for existing/potential mobility problems at both the impairment and disability levels. Selected principles of and techniques for body mechanics, patient handling, positioning and draping, bed mobility, transfers, gait, wheelchair prescription and mobility, positional/transitional equipment use, bandaging, range-of-motion exercise, and soft tissue treatment are addressed.

2 credits

#### *PTHED 1566 Physical Therapy Interventions II*

This course continues the series of courses focused on intervention strategies and provides students with the theoretical principles and skills of therapeutic exercise and joint mobilization. Course content includes isometric, isotonic, isokinetic, eccentric and concentric strengthening activities; active and passive stretching, proprioceptive neuromuscular facilitation (PNF); principles of musculoskeletal treatment, joint mobilization, and relaxation/mindfulness.

3 credits

#### *PTHED 1577 Physical Therapy Evaluation I*

This course provides the foundation for physical therapy evaluation including history, systems review, tests/measures, prognosis, differential diagnosis, physical therapy impression, identification of patient problems, goals and intervention plans. Students gain skill in patient questioning and history taking, examination of pain, vital signs, posture, palpation skill, anthropometric and goniometric measurement, manual muscle strength testing, sensory examination and documentation skills.

4 credits

#### *PTHED 1578 Physical Therapy Evaluation II*

This course builds on the principles introduced in Physical Therapy Evaluation I, focusing on the identification of dysfunction in specific regions of the body including the upper and lower limbs, the spine, pelvis and the temporomandibular joint using special tests, joint examination procedures, strength testing devices, functional assessment and neurovascular evaluation. Students select appropriate special tests and examination procedures to identify musculoskeletal diagnoses.

4 credits

*PTHED 1582 Kinesiology/Biomechanics I*

This course addresses the recognition, description and analysis of the components of normal movement in static and dynamic activities, applying basic theories of mechanics of normal tissue, structure and properties of connective tissue, and general joint relationships. Normal joint mechanics for the shoulder, elbow, wrist and hand, and interrelationships between the anatomical structure and the normal kinematic behavior of joints are discussed. Theories of motor learning and motor control influencing activity of the musculoskeletal system are introduced. Lecture, lab, and movement analysis project facilitate learning.

3 credits

*PTHED 1584 Kinesiology/Biomechanics II*

This course is a continuation of the principles and theories introduced in Kinesiology/Biomechanics I. Students will be able to recognize and describe basic theories of mechanics and the components of normal movement in static and dynamic states as it relates to the spine, temporomandibular joint, lower extremity, and gait activities. Course content includes the interrelationships between anatomical structure and normal kinematic behavior of joints, muscle function, and human gait. Also, foundations for analyzing and identifying the components of gait are covered.

3 credits

*PTHED 1601 Cardiopulmonary Evaluation and Treatment*

This course will provide students with a comprehensive background in the anatomy, physiology, and pathology of the cardiovascular and pulmonary systems. These concepts, along with general principles of physical therapy intervention, will then form the basis for physical therapy management of people with cardiopulmonary (CP) disorders. Issues such as the effect of exercise training on the CP system and contraindications for PT are presented and discussed.

3 credits

*PTHED 1602 Essentials of Pharmacology for Physical Therapists*

This course introduces students to pharmacological intervention in patient management. The course describes basic drug-receptor interactions, dose-response curves and absorption, distribution, metabolism, excretion, and storage of drugs within the body.

2 credits

*PTHED 1605 Clinical Problem Solving II*

This course is designed to reinforce and enhance the reasoning process used to make clinical decisions. The course includes in depth analysis of planning the history gathering process, planning the tests and measures including a formal functional outcome assessment, forming a physical therapy impression, developing an intervention plan and re-

evaluation plan as applied to a patient with a musculoskeletal condition. Communication to physicians regarding clinical impressions is also included.

2 credits

*PTHED 1607 Scholarly Development in Physical Therapy I*

This course consists of participation and presentation in a "professional" journal club related to physical therapy. The course meets once/quarter starting in the first spring, and runs through the second winter of the program. Journal club meetings consist of review and discussion sessions of scientific evidence (journal articles) led by students. The journal club provides exposure to a variety of research designs.

1 credit

*PTHED 1608 Orthotics*

This course introduces students to the use of orthoses to improve function as a result of impairment of the upper extremity, lower extremity, or spine. Components, materials, design, fabrication, fitting, alignment, prescription, training, and total patient management are discussed. Emphasis is placed on lower extremity orthotics, development of basic analytical and psychomotor skills for adapting tools, equipment, environments, and activities to enhance function as well as design and fabrication of orthoses.

2 credits

*PTHED 1622 Preparation for Clinical Education II*

This course continues discussion of concepts of written and oral professional communication and provides opportunities for practice of skills in communication, time management, supervision and delegation, patient evaluation, infection control/universal precautions, cardiopulmonary resuscitation/first aid, mobility training, and patient education in simulated physical therapy practice environments. It also provides the opportunity to appreciate the perspective of patients/families.

1 credit

*PTHED 1628 Clinical Conditions II*

Students learn about the medical management of central nervous system, cardiovascular and pulmonary disorders as well as other common conditions. Risk factors, clinical signs and symptoms and differential diagnoses are some of the issues addressed. Lectures are combined with weekly problem-based learning sessions to promote critical thinking and an evidence-based approach to treatment.

3 credits

*PTHED 1633 Applied Neuroscience*

This interdisciplinary course is the second of two courses. The first part of this course develops students' ability to identify and describe the principal structural components and corresponding functions of the nervous system. Lesions

involving these structures will be correlated with neurological deficits and dysfunctions. The second part of the course develops students' ability to understand the clinical relevance and application of various aspects of neuroscience.  
3 credits

*PTHED 1638 Physical Agents I*

This course addresses the theoretical principles of physiological and neurophysiological changes that occur as a result of the application of physical modalities. Students will develop skill in application of these modalities including superficial/deep heating agents, cold agents, light therapies and external compression. Content includes manipulation of agent parameters in order to perform an effective and efficient treatment given patient variables. In addition, the course addresses the evaluation and care of the integument system including wound care and lymphatic conditions.  
3 credits

*PTHED 1639 Physical Agents II*

This course is a continuation of Physical Agents I addressing application of additional physical agents, and introducing electrotherapeutic modalities that are used in physical therapy practice. Electrotherapy for muscle strengthening, improved function, motor control, pain management and surface electromyography is discussed with emphasis on manipulation of equipment parameters for safe and effective application of these modalities. Electrophysiologic evaluation in physical therapy practice is introduced as well as basic principles of aquatic therapy.  
3 credits

*PTHED 1667 Physical Therapy Interventions III*

This is the third course in the Physical Therapy Intervention series. This course builds on the principles of developing intervention plans of therapeutic exercise and/or non-thrust joint mobilization previously introduced in Physical Therapy Interventions II. This course applies those principles to areas of the body not previously covered including the spinal, temporomandibular, pelvic and lower extremity joints. In addition, clinical conditions affecting these areas of the body will be discussed as they relate to developing physical therapy intervention plans.  
3 credits

*PTHED 1681 Neurologic Evaluation and Treatment: Adult I*

This is the first of three courses introducing the assessment and treatment of impairments, activity limitations, and participation restrictions in persons with neurologic dysfunction. This course focuses on adults with CVA, TBI, PD or vestibular disorders. Using a motor control framework and the Guide to Physical Therapist Practice, students will learn to select, perform, interpret, and modify examination

procedures and evidence-based interventions, techniques, and compensatory strategies in the attainment of functional goals.  
5 credits

*PTHED 1682 Neurologic Evaluation and Treatment: Pediatrics*

This is the second of three courses introducing students to the assessment and treatment of impairments, activity limitations, and participation restrictions in patients with neurologic dysfunction. This course focuses on children with hypertonia (cerebral palsy), hypotonia (Down's syndrome), and spinal cord injury (myelomeningocele). Students will learn, select, perform, interpret, and modify age-appropriate examination procedures, as well as, intervention strategies within a family-centered environment. Lecture, lab, a clinical observation experience, and a group case project will facilitate learning.  
4 credits

*PTHED 1685 Practicum I*

This course is a three-week, full-time, supervised clinical experience in a healthcare environment. Students practice skills in communication, patient evaluation and management, infection control/standard precautions, and patient education.  
3 credits

*PTHED 1686 Practicum II*

This course is a ten week, full-time, supervised clinical practice in a healthcare environment. Students earn 1 credit for each 40 hour week of clinic work. The course includes a project on serving underserved populations and/or cultural competence in healthcare. Students earn 1 credit for the project.  
11 credits

*PTHED 1708 Scholarly Development in Physical Therapy II*

Students develop an evidence-based, detailed, and publishable quality manuscript for either an experimental design project, a systematic review, or case report. For the experimental design projects and the systematic reviews, students will work under the guidance of the faculty advisor beginning in the winter quarter of the first year. For the case report, students meet with their faculty advisor prior to Practicum II regarding selection of a patient and expectations of the report. After the final written report is accepted, projects are presented orally as either a platform or poster presentation.  
2 credits

*PTHED 1709 Clinical Problem Solving III*

This is the last course in a 3 course series, designed to reinforce and enhance the reasoning process used to make clinical decisions. In this course, clinical problem solving and

patient management decisions focus on children and adults who present with complex medical conditions. To facilitate knowledge synthesis and application, this course will include complex patient cases requiring online and in-class activities, critical appraisal of evidence, and the development of a plan for successful completion of the NPTE exam.

2 credits

#### *PTHED 1711 Prosthetics*

This course introduces students to the use of upper and lower extremity prostheses. Components, materials, design, fitting, alignment, prescription, training, and total patient management are discussed. Emphasis is placed on lower extremity prostheses, development of basic analytical and psychomotor skills for adapting tools, equipment, environments, and activities to enhance function. A combination of lecture, discussion, laboratory, and group projects are used to achieve the course objectives.

2 credits

#### *PTHED 1715 Physical Therapy Roles and Professional Issues II*

This is the second of two courses which facilitate the student's understanding of the roles of the physical therapist and current professional issues. This course builds on previous coursework in patient/client management, educational principles, management and supervision, and administration, Preparation for Clinical Education I and II as well as Practica I and II. Focus is on the role of the physical therapist as a supervisor, a consultant, clinical educator and contributor to the professional body of knowledge. The impact of a variety of professional issues on healthcare and physical therapy practice are discussed. Issues related to the transition from the professional preparation program to clinical practice are discussed.

3 credits

#### *PTHED 1746 Topics in Pediatric Physical Therapy*

This course introduces principles of physical therapy practice with children and expands on pediatric physical therapy patient/client management introduced in earlier courses. This course will cover topics relevant to pediatric practice in three broad areas: pediatric settings (NICU, EI, school, outpatient rehabilitation), laws governing pediatric practice (IDEA parts B & C), and management of conditions frequently seen by pediatric physical therapists. The course will focus on the comprehensive physical therapy management of children who present with: juvenile rheumatoid arthritis, osteogenesis imperfecta, Duchenne muscular dystrophy, torticollis, brachial plexus injury, genetic disorders, orthopedic conditions, and pediatric sports injuries. Lectures, labs, case studies, and group projects facilitate learning in this course.

2 credits

#### *PTHED 1747 Human Anatomy II*

This lab based course will examine, in detail, the anatomical structures of the extremities, head and trunk. Bones, joint structures, muscles, nerves and vessels and their relationship to joint movement and function will be emphasized. Information about these structures and their function will be applied to clinical issues that relate to human movement, structural impairment and physical therapy assessment and treatment. Self-directed learning is an expectation of this course.

3 credits

#### *PTHED 1750 Topics in Physical Therapy Practice*

This course addresses practice issues in three broad categories. Principles of critical inquiry are applied to clinical decision making skills when evaluating different approaches to physical therapy. Students research and present the strengths and weaknesses of varied approaches (i.e., kinesiotaping, rolfing, Tai Chi, ASTYM, ankle and knee bracing, etc.). The second category explores practice issues related to industrial medicine, women's health, pelvic floor dysfunction, chronic pain and joint replacement. The third category discusses evaluation and intervention for older adults.

3 credits

#### *PTHED 1751 Management in Physical Therapy Systems*

This is the first of two courses devoted to management in physical therapy settings. The course provides a foundation in healthcare environments and delivery systems, personnel management, organizational structures and systems, supervision, leadership, fiscal management, reimbursement and documentation, sales and marketing, legal issues, risk management and outcomes measurement and management.

3 credits

#### *PTHED 1752 Applied Management Skills in Physical Therapy Systems*

Students apply principles from PTHED 1751: Management in Physical Therapy Systems. Structured around the development of a strategic plan for a rehabilitation product or service, this course includes forming and integrating organization, marketing, sales, management, production/service, financial and evaluation strategies. Student teams design a strategic plan provided by community facilities. Students present their strategic plans via a written report and an oral presentation.

2 credits

#### *PTHED 1753 Health Promotion II*

In this course students apply principles presented in Health Promotion I and principles of teaching and learning. The students plan, implement, and evaluate a health promotion and/or disease/injury prevention program for a community group in need of wellness or prevention services under the

guidance of a faculty mentor. Each group provides an oral presentation to their classmates focusing on an in-depth analysis of the strengths and weaknesses of their program. This class is a combination of independent study and discussion.

2 credits

#### *PTHED 1770 Advanced Musculoskeletal Evaluation and Treatment*

This is the final course addressing advanced issues in individuals with musculoskeletal dysfunction. This course builds on previous content and unites evaluation and intervention of patients with complex spinal and extremity musculoskeletal problems including pre- and post-surgical situations. Course content will also promote application of concepts introduced earlier the curriculum including pain science, pharmacology and imaging to advance clinical decision making and evaluation and intervention planning. Additional course content includes task specific performance evaluation and training, return to play decision making, and health and wellness and fitness screening.

4 credits

#### *PTHED 1781 Neurologic Evaluation and Treatment: Adult II*

This final course in the neurologic evaluation and treatment series continues the focus on the assessment and treatment of impairments, activity limitations, and participation restrictions in adults with neurologic dysfunction. Management of persons with spinal cord injury, cerebellar dysfunction, progressive neurological disorders, and headaches/concussion symptoms is discussed. Application of examination and treatment process will be considered through a case scenario format. Students will be expected to develop and execute treatments for patients with dysfunction.

3 credits

#### *PTHED 1787 Practicum III*

This course is a ten-week, full-time, supervised clinical practice in a healthcare environment. Students earn 1 credit for each 40 hour week of clinic work. The course includes an independent study component that utilizes evidence based practice to answer a clinical question. Students earn 1 credit for the evidence based practice project. For either Practicum III or Practicum IV, this course will also include a written reflection regarding interprofessional practice within clinical education.

12 credits

#### *PTHED 1788 Practicum IV*

This course is a ten-week, full-time, supervised clinical practice in a healthcare environment. Students earn 1 credit for each 40 hour week of clinic work. The course includes an independent study component that utilizes evidence based

practice to answer a clinical question. Students earn 1 credit for the evidence based practice project. For either Practicum III or Practicum IV, this course will also include a written reflection regarding interprofessional practice within clinical education.

12 credits

## ELECTIVE OPTIONS

#### *PTHED 1400 Independent Study in Physical Therapy Practice*

This course is designed to allow the student to be actively engaged in independent study of a topic of their choice after consultation with faculty. Student will analyze concepts and dynamics of the topic such as: ethical conflicts, certification issues, utilization, trends and patterns of practice, managed care issues, and roles of the PT with other healthcare providers. The student will utilize multiple resources to gather information on the topic including traditional evidence searches, professional interviews, and shadowing.

2 credits

#### *PTHED 1401 Standardized Measurement and Clinical Problem Solving in Pediatric Physical Therapy*

This course will expand upon the introduction to standardized measurement provided in PTHED 1545, and content on pediatric examination and intervention provided in PTHED 1682. Students will examine the measurement characteristics of commonly used standardized assessment tools used in pediatrics, select and administer appropriate tools as part of a comprehensive pediatric evaluation, and interpret results of completed assessments. Students will plan and implement an intervention session for a child with a disability under the supervision of a licensed physical therapist. The seminar-type course will include three clinical experiences.

2 credits

#### *PTHED 1403 Clinical Application of Quantitative Gait Data in the Pediatric Population*

Expanding on concepts covered in Kinesiology II and Lifespan Human Development, this elective will offer advanced understanding on the biomechanical assessment of gait (3-D kinematics, kinetics, and electromyography). Emphasis will be placed on the application of quantitative gait data for (1) clinical decision making and (2) evaluating outcomes of intervention in children with orthopaedic and neuromuscular disorders. Students will meet weekly with faculty to understand how quantitative gait data is collected and interpreted. Lab sessions will review physical examination measures used for children and instrumentation for 3-D gait analysis. A site visit will also be included at Shriners Hospitals for Children-Chicago where students will participate in data collection on a patient and attend an



intervention planning session with orthopaedic surgeons.

1 credit

Prerequisites: Overall GPA of 3.0 and successful completion of all Physical Therapy Program courses through the spring quarter of the second year.

*PTHED 1404 Physical Therapy Management of Female Pelvic Floor Function*

This course will offer an advanced understanding of the role of the female pelvic floor musculature and urinary incontinence. Students will meet weekly with faculty to increase their understanding of pelvic floor muscle exam, urinary incontinence and physical therapy interventions. Students will use a review of the literature to develop an examination and plan of care for patients presenting with urinary incontinence.

1 credit

*PTHED 1405 Research Elective*

The research elective is designed to allow the student to plan and participate in a research project under the supervision of Midwestern University Physical Therapy faculty. Students are expected to work relatively independently and to make a substantial contribution to the overall research design, project implementation, data analysis or communication of findings on the project. However, it is recognized that the student is not the person primarily responsible for the project and that the faculty mentor supervises the student in their work.

2 credits

*PTHED 1406 Biomechanical Foundations of Human Movement*

Expanding on concepts introduced in Kinesiology/Biomechanics I & II, this course provides students with an advanced account of the biomechanical factors underlying the coordination and control of movement. Emphasis is on the biomechanical methods for the analysis of human movement. A weekly lecture will highlight movement in terms of its kinetic, kinematic, and electromyographical aspects. Laboratory sessions will include introductions to motion analysis technology, force platforms, and electromyographic kinesiology.

2 credits

*PTHED 1407 Vestibular Rehabilitation*

This course will provide students with an introductory understanding of inter-professional roles in the management of complex patients with vestibular dysfunction. Students will meet weekly with inter-professional faculty to discuss select topics such as anxiety and depression, vision therapy, pharmacology, vestibular testing, and surgical intervention and how each topic impacts vestibular rehabilitation. Emphasis will be placed on best practice.

1 credit

## STUDENT ACADEMIC POLICIES

### Academic Progress

The academic standing of a student is determined by the student's cumulative grade point average. To progress to the next quarter, a student must satisfactorily complete all didactic courses and academic requirements for the preceding quarter.

### Basic Life Support Certification

Enrolled PT students must maintain First Aid and American Heart Association CPR certification at the basic life support (BLS) level.

## FACULTY

### Deborah Anderson, PT, Ed.D., P.C.S.

Northern Illinois University  
College of Education  
Program Director and Associate Professor

### Elizabeth Campione, PT, DPT, CLT-LANA

Northwestern University  
Assistant Professor

### Christine Conroy, PT, Ph.D., FNAP

Rosalind Franklin University  
College of Health Professions  
Associate Professor

### Thomas J. Dillon, PT, DPT, O.C.S

Midwestern University  
College of Health Sciences  
Clinical Assistant Professor

### Teri Elliott-Burke, PT, DPT, W.C.S

College of St. Scholastica  
Clinic Coordinator and Clinical Associate Professor

### Christian C. Evans, PT, Ph.D.

University of Illinois at Chicago  
College of Medicine  
Professor

### Kathy D. Hall, PT, Ed.D.

Northern Illinois University  
College of Education  
Professor

### Timothy A. Hanke, PT, Ph.D.

University of Connecticut  
Department of Kinesiology  
Professor

### Janet O. Helminski, PT, Ph.D.

Northwestern University  
Institute for Neuroscience  
Department of Neurobiology and Physiology  
Professor

**Judith Burton Hess, PT, D.H.S., O.C.S., Cert. DN**  
Midwestern University  
College of Health Sciences  
Assistant Professor

**Kent Irwin, PT, D.H.S, M.S., G.C.S.**  
Midwestern University  
College of Health Sciences  
Associate Professor

**Sarah A. Keller, PT, DPT, N.C.S**  
St. Louis University  
Doisy College of Health Sciences  
Co-Director of Clinical Education and Assistant Professor

**Seth Kress, PT, DPT**  
Rosalind Franklin University  
College of Health Professions  
Co-Director of Clinical Education and Instructor

**Joseph J. Krzak, PT, Ph.D., P.C.S**  
University of Illinois at Chicago  
College of Applied Health Sciences  
Associate Professor

**Janey Prodoehl, PT, Ph.D., C.C.T.T.**  
University of Illinois at Chicago  
College of Applied Health Sciences  
Assistant Program Director and Professor

## **COLLEGE OF GRADUATE STUDIES FACULTY WITH JOINT APPOINTMENTS**

**Thomas M. Bodenstine, Ph.D.**  
University of Alabama at Birmingham  
Assistant Professor

**Mae J. Ciancio, Ph.D.**  
Loyola University Chicago  
Associate Professor

**Kathleen P. O'Hagan, Ph.D.**  
Rutgers University  
Chair and Professor, Department of Physiology

**Michelle Singleton, Ph.D.**  
Washington University  
Professor

# OCCUPATIONAL THERAPY PROGRAM

## MISSION

The Occupational Therapy Program is dedicated to excellence in the education of occupational therapists, and the development of a community of practice leaders who will meet the occupational needs of individuals and communities through compassionate, innovative, and evidence-informed practice.

## ACCREDITATION

The Midwestern University Occupational Therapy Program is overseen by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its Web address is [www.acoteonline.org](http://www.acoteonline.org). The Doctor of Occupational Therapy Program is fully accredited. Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT).

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1411.

## DEGREE DESCRIPTION

The Occupational Therapy Program offers a curriculum leading to the Doctor of Occupational Therapy (OTD) degree for qualified students. The full-time, continuous, entry-level doctoral curriculum is designed to deliver the academic and clinical education required to prepare students for their professional role as key members of the healthcare team, and as integral practitioners in the healthcare delivery system. The curriculum for the Doctor of Occupational Therapy degree is a continuous, full-time program, extending 33 months from matriculation to graduation. The maximum allotted time for completion of this program is 49.5 months. It is also required that all Level II fieldwork and doctoral experiential internship requirements must be fulfilled within 16.5 months of completion of the didactic portion of the program.

The Doctor of Occupational Therapy Program offers a balanced combination of foundational, clinical, research and experiential coursework designed to foster therapists who are self-directed, thoughtful, and caring professionals. Approximately two thirds of the 160 curriculum credits are devoted to courses that are centered on the processes and practice of occupational therapy, including fieldwork experiences and the doctoral capstone and internship courses. The remaining one third of the credits include content focused on research, leadership and professional development, and program development. Fieldwork Level I experiences are simultaneous with the occupational therapy practice courses to facilitate students' application of pediatric, adult, and psychosocial content related to evaluation and intervention. This strong curricular framework succeeds in preparing graduates who are practice leaders in occupational therapy.

The Occupational Therapy Program is open on a competitive admission basis to applicants who have received a bachelor's degree in any field, but who have not completed an accredited occupational therapy program. The Program does not accept students who transfer from another Occupational Therapy Program. The curriculum is designed to prepare entry-level practitioners to provide occupational therapy services in the home, community, and clinical practice settings that require independent judgment, leadership, and self-directed practice. The educational experiences provide the foundation for graduates to identify and contribute to effecting solutions to the major emergent health issues of society and to contribute to the academic and clinical education of future occupational therapy practitioners. The curriculum is designed to prepare graduates for varied roles within occupational therapy, such as practitioner, manager, educator of consumers and peers, and foster leadership roles as faculty, consultant, or entrepreneur. The graduate will be well-prepared to make meaningful, ongoing contributions to individuals, groups, communities, and the profession through collaborative efforts with others in occupational therapy and interdisciplinary education, practice, and research.

## Program Objectives

Upon completion of the Occupational Therapy Doctorate program, graduates are expected to:

1. Deliver evidence-informed, occupation-based and occupation-focused services to individuals and groups to promote health, well-being and quality of life
2. Meet the occupational needs of culturally and socially diverse individuals and communities through advocacy and leadership
3. Develop and implement innovative programs for occupational therapy services in traditional and emerging areas of practice
4. Engage in clinical research to facilitate promotion and dissemination of knowledge
5. Uphold the ethical standards, values and attitudes of the occupational therapy profession in one's work, service, and ongoing professional development

These outcomes are accomplished through:

1. A curriculum model based on intentionally sequenced courses that serve as vital links between application, synthesis, and evaluation of knowledge, skills, and attitudes.
2. Intentional dynamic integration of authentic clinical experiences across the curriculum.
3. Critical application of current research and available evidence to improve occupational therapy practice and contribute to the knowledge base of the profession.
4. Occupation-focused coursework and fieldwork experiences designed to embrace critical and ethical reasoning across the lifespan.
5. Collaboration to facilitate individual and group work to develop leadership, team building, and professional skills, behaviors and attitudes.

## ADMISSIONS

The College of Health Sciences Occupational Therapy Program considers for admission those applicants who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. To select these candidates, a competitive admissions framework has been established. Within this competitive admissions framework, multiple criteria are used to select the most qualified candidates from an applicant pool that exceeds the number of seats available. Interested individuals are advised to complete their application as early as possible to ensure timely consideration.

The Midwestern University Occupational Therapy Program uses the Centralized Application Service for Occupational Therapy Schools (OTCAS) for students applying to the Program. All applicants to the Occupational Therapy

Program are required to submit their applications to OTCAS (<http://www.otcas.org>) with all required materials by February 1, 2021. Please refer to the OTCAS website for instructions on submission of OTCAS application materials. The Occupational Therapy Program operates on a rolling admissions basis in which completed applications are reviewed throughout the admissions cycle to determine applicant eligibility for interviews. Interviews are typically conducted during the winter and spring quarters. Admissions decisions are generally made within one month of the interview.

### Admission Requirements

Individuals applying for admission to the College of Health Sciences Occupational Therapy Program must submit documentation for the following minimum requirements before the academic year commences for the incoming class:

1. Completion of a baccalaureate degree from a regionally accredited college or university.
2. A minimum cumulative undergraduate grade point average (GPA) of 3.00 on a 4.00 scale. Grades of C or better for prerequisite coursework; grades of C- are not acceptable.
3. Completion of the minimum number of prerequisite courses in the prescribed subject areas at regionally accredited colleges or universities.
4. Satisfaction of the standards set forth by the Admissions Committee (including documentation of academic and professional promise in prospective students).
5. Completion of the Occupational Therapy Program's interview process. On-campus interviews are by invitation only. Applicants are invited to an interview based on evidence supportive of excellence in:
  - Academic achievement
  - Oral and written communication skills
  - Articulation of the domain and scope of OT practice
  - Community service
  - Leadership in extracurricular or other activities
6. Completion of a first aid course within the three years prior to enrollment.
7. Current certification by the American Heart Association in Basic Life Support (BLS) for Health Care Providers.
8. Demonstration of a people or service orientation through community service or extracurricular activities.
9. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences.
10. Oral and written communication skills necessary to interact with clients and colleagues.

11. Commitment to abide by Midwestern University Drug-Free Workplace and Substance Abuse Policy.
12. Passage of the Midwestern University criminal background check.

### Prerequisite Courses

Students must complete these courses with a grade of C or better; grades of C- are not acceptable:

Human Anatomy <sup>1,2</sup>	3 Sem/4 Qtr hrs
Physiology <sup>1</sup>	3 Sem/4 Qtr hrs
Statistics	3 Sem/4 Qtr hrs
Lifespan Development	3 Sem/4 Qtr hrs
Abnormal Psychology	3 Sem/4 Qtr hrs
Other Social and Behavioral Science	3 Sem/4 Qtr hrs

<sup>1</sup>The Anatomy and Physiology requirements may also be fulfilled by taking Anatomy and Physiology I *and* Anatomy and Physiology II, as some universities offer combined courses.

<sup>2</sup>Human Anatomy must be completed successfully within 5 years of admission to the Program. The lab component with cadaver experience is strongly recommended.

A course in child development, and a course in the sociology or psychology of aging, are highly recommended. Additional courses in the sciences and mathematics are recommended, including chemistry, physiology, physics, and biology. General education electives are also recommended to demonstrate competency in English composition, oral communication, problem-solving behavior, logic, and ethical theories.

### Application Process and Deadlines

To be considered for admission to the Occupational Therapy Program, applicants must submit the following to the Office of Admissions:

1. OTCAS Application  
Applicants are required to submit their applications to OTCAS at <http://www.otcas.org> by February 1, 2021. Please refer to the OTCAS application instructions for specific details about completing the application, required documents, and processing time. The OTCAS application should be available for applicants beginning in Summer 2020. Due to the large number of applications and the limited number of seats available, applicants are strongly encouraged to complete their OTCAS application early in the cycle.
2. Letters of Recommendation  
Applicants are required to submit a minimum of two letters of recommendation from professionals to OTCAS (<http://www.otcas.org>). The Office of

Admissions will only accept letters of recommendation received directly from OTCAS. It is preferred that one of the submitted letters is written by an occupational therapist who has supervised or mentored the applicant or a professional who can speak to the applicant's motivation, experiences in occupational therapy, or readiness for entering the Occupational Therapy Program. The second letter can be written by either a college professor who actually taught the student or a prehealth advisor who knows the applicant well. The applicant should refer to the OTCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.

3. Completed Applications

The Office of Admissions will send letters verifying receipt of OTCAS applications with all required materials to all applications who meet the minimum cumulative GPA requirement of 3.00. The letters will also include instructions on checking the status of the required application materials online. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit completed applications with all required application materials will be considered for potential entrance into the Program.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via e-mail, fax, or letter to:

Midwestern University  
Office of Admissions  
555 31st St. Downers Grove, IL 60515  
Fax: 630/971-6086  
[admissil@midwestern.edu](mailto:admissil@midwestern.edu)

### Interview and Selection Process

Students selected for an interview will be notified of available interview dates and invited by the Office of Admissions to schedule their on-campus interview. A typical interview day involves participation in the following activities, which are coordinated by the Office of Admissions: an interview with two occupational therapy faculty interviewers, lunch with current Midwestern University occupational therapy students, a campus tour, and an opportunity to meet with counselors from the admissions office and the financial aid office.

During each interview session, the interviewers question the applicant about their academic, personal, and professional aspirations and preparedness for admission to the Occupational Therapy Program, and rate prospective students on a standard evaluation form. These evaluations are included in applicant files provided to the Occupational

Therapy Admissions Committee. The Occupational Therapy Admissions Committee meets approximately one to two weeks after the interviews. The Committee reviews the full application file for applicants who were interviewed and then formulates and submits a recommendation to the Dean for action. The Dean, via the Office of Admissions, notifies each applicant in writing of the admission action/decision. Applicants are extended acceptance to the program based on the aggregate qualitative and quantitative data gathered from the application, interview process, and the completion of all published admissions requirements.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively in both oral and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal

skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Reapplication Process**

Students who receive denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, however, individuals contemplating reapplication should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

## **EVALUATION OF STUDENT PERFORMANCE**

Students in the Doctor of Occupational Therapy Program are formally evaluated at appropriate intervals during the curriculum to assess and document satisfactory progress and achievement of learning objectives and prescribed competencies. These evaluations occur on a regular basis at scheduled times during each course. Depending on the learning and competency outcome objectives, these evaluations are designed to assess the level of knowledge, problem-solving skills, psychomotor and clinical competencies, and behavioral performances of students during each course and/or fieldwork experience. Evaluation methods vary, depending on the course or experiential learning opportunity, and may include formal examinations, written essays, portfolio assignments, design and fabrication projects, psychomotor skill checks, or other methods of determining the extent to which each student has mastered

the course content and skill competencies. Student performance in formal examinations is graded on a numerical/alphabetical system using a standard grading scale, which is published in this catalog and the Midwestern University Student Handbook. Students are customarily provided with feedback and grade reports after each examination summarizing their performance on each test item. Students will be required to participate in competency-based evaluations at various intervals throughout their academic tenure.

Evaluations of student performance during the Fieldwork II experiences are formalized using standard evaluation tools established by the American Occupational Therapy Association. In keeping with the Program's mission to exceed national standards, the Occupational Therapy Program reserves the right to augment the performance criteria required to successfully complete the Fieldwork Level II courses.

Evaluations of student performance during the Doctoral Internship and Capstone projects are formalized on a project-by-project basis consistent with the individualized nature of this final segment of the Doctor of Occupational Therapy curriculum. Student performance is evaluated based on faculty mentor and on-site mentor input.

## GRADUATION REQUIREMENTS

To qualify for the Doctor of Occupational Therapy degree (OTD), students must:

1. Satisfactorily complete all courses with a minimum cumulative GPA of 3.00 or higher;
2. Satisfactorily complete the required minimum number of 160 credit hours in the curriculum;
3. Receive a favorable recommendation for Doctorate degree conferral from the Program faculty to the Program Student Academic Review Committee and from this committee to the CHS Student Promotion and Graduation Committee;
4. Receive a favorable recommendation for Doctorate degree conferral from the University Faculty Senate;
5. Settle all financial accounts with the University; and
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## LICENSURE REQUIREMENTS

Occupational Therapy is a registered and/or licensed profession in all 50 states. To become licensed to practice as an occupational therapist in most states (including Illinois), a student must graduate from an ACOTE-accredited or approved educational program and pass the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). Most states (including Illinois) require status as an occupational therapist registered

(OTR) to become a licensed occupational therapist (OTR/L). A prior felony conviction may affect a graduate's ability to sit for the NBCOT Certification Exam or attain state licensure.

Midwestern University's Doctor of Occupational Therapy program is designed to meet the educational requirements to meet the licensure requirements to practice as an occupational therapist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

The Doctor of Occupational Therapy program curriculum has not made a determination if the program meets the requirements in the territory of the U.S. Virgin Islands.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

## CURRICULUM

The professional doctorate curriculum is composed of 46 required course credits (quarter hours) for the first calendar year, 58 required course credits for the second calendar year, and 56 required course credits for the third calendar year, for a total of 160 quarter credits. All courses in each quarter are prerequisite to courses in the subsequent quarter.

Fieldwork courses are placed in the second and third years of the curriculum and include three Level I experiences and two 12-credit Level II Fieldwork experiences. Students' proficiency in evaluation and intervention, independent decision-making and critical thinking are emphasized during Fieldwork II-A and II-B of the curriculum. Fieldwork experiences are offered in clinical, community, hospital, school, and other facilities that have a legal agreement with the University and are located throughout the continental United States.

As one component of the Capstone process, the 16-week Doctoral Internship is positioned in the winter and spring quarters of the third year of the curriculum. Whereas the Fieldwork Level II experiences primarily focus on evaluation and intervention processes of occupational therapy, the Capstone and Doctoral Internship experiences are individualized according to each student's areas of interest in occupational therapy program development, research, leadership or advocacy.

The Midwestern University College of Health Sciences Occupational Therapy Program reserves the right to alter its curriculum however and whenever it deems appropriate.

Total Quarter Credits in the Professional Program: 160

**First Professional Year:**

Total Quarter Credit Hours Required: 46

**Fall Quarter**

CORED	1599E	Interprofessional Education I	1
OTHED	1501	Professional Development I	3
OTHED	1505	Neuroscience for Occupation	3
OTHED	1520	Occupation	3
OTHED	1550	Therapeutic Communication	3
OTHED	1555	Analysis of Occupations	3

**Total 16**

**Winter Quarter**

OTHED	1503	Movement for Occupation	3
OTHED	1504	Movement Skills Lab	1
OTHED	1510	Critical Analysis of Evidence	3
OTHED	1530	Theoretical Foundations of Occupational Therapy	3
OTHED	1535	Conceptual Approach to Conditions	3
OTHED	1540	Occupational Therapy Process: Foundations	2

**Total 15**

**Spring Quarter**

OTHED	1512	Research Project Development	3
OTHED	1545	Occupational Therapy Process: Children	4
OTHED	1547	Occupational Therapy Process: Adults	4
OTHED	1549	Occupational Therapy Process: Psychosocial	4

**Total 15**

**Second Professional Year:**

**Note.** The student cohort will be split for select courses in the summer and fall quarters. Students will enroll in OTHED 1645 and 1646 (Children) OR OTHED 1647 and 1648 (Adults) each quarter. Students will enroll in OTHED 1652 either in summer or fall quarters.

Total Quarter Credit Hours Required: 59

**Summer Quarter Note.** The student cohort will be split for select courses in the summer and fall quarters. Students will enroll in OTHED 1645 and 1646 (Children) OR OTHED 1647 and 1648 (Adults) each quarter. Students will enroll in OTHED 1652 either in summer or fall quarters.

OTHED	1610	Research Project Implementation	3
OTHED	1645	Occupational Therapy Practice: Children	4
OTHED	1646	Fieldwork I-A	1
		OR	
OTHED	1647	Occupational Therapy Practice: Adults	4
OTHED	1648	Fieldwork I-B	1
OTHED	1650	Activities of Daily Life	2
OTHED	1651	Group Process	3
OTHED	1652	Fieldwork I-C	1
<b>Total</b>			<b>13/14</b>

**Fall Quarter Note.** The student cohort will be split for select courses in the summer and fall quarters. Students will enroll in OTHED 1645 and 1646 (Children) OR OTHED 1647 and 1648 (Adults) each quarter. Students will enroll in OTHED 1652 either in summer or fall quarters.

OTHED	1612	Research Project Synthesis	3
OTHED	1630	Needs Assessment	3
OTHED	1645	Occupational Therapy Practice: Children	4
OTHED	1646	Fieldwork I-A	1
		OR	
OTHED	1647	Occupational Therapy Practice: Adults	4
OTHED	1648	Fieldwork I-B	1
OTHED	1649	Occupational Therapy Practice: Psychosocial	4
OTHED	1652	Fieldwork I-C	1
<b>Total</b>			<b>15/16</b>

**Winter Quarter**

OTHED	1635	Fieldwork Preparation I	1
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OTHED 1636	Fieldwork II-A	6
OTHED 1655	Occupational Therapy Leadership	2
OTHED 1661	Occupational Therapy for Upper Extremity Function	3
OTHED 1670	Disability and Policy	2
OTHED 1680	Educational Strategies in Occupational Therapy	2
<b>Total</b>		<b>16</b>

#### Spring Quarter

OTHED 1601	Professional Development II	3
OTHED 1614	Data-based Decision Making	2
OTHED 1632	Program Development	3
OTHED 1637	Fieldwork II-A	6
<b>Total</b>		<b>14</b>

#### Third Professional Year:

**8 required course credits of Seminar Options in summer quarter.**

#### \*Seminar Options (Offered Weeks 1-5)

#### \*\*Seminar Options (Offered Weeks 6-10)

Total Quarter Credit Hours Required: 55

#### Summer Quarter

OTHED 1716	Professional Writing	2
OTHED 1720	Occupational Science (*Seminar Option)	2
OTHED 1722	Recovery and Occupation (**Seminar Option)	2
OTHED 1725	Ergonomics and Universal Design (*Seminar Option)	2
OTHED 1730	Program Evaluation	2
OTHED 1732	Intellectual and Developmental Disabilities (**Seminar Option)	2
OTHED 1735	Fieldwork Preparation II	1
OTHED 1740	School-based Practice (**Seminar Option)	2
OTHED 1744	Cognition and Executive Functioning (*Seminar Option)	2
OTHED 1746	Neurorehabilitation (*Seminar Option)	2

OTHED 1748	Gerontology (**Seminar Option)	2
OTHED 1750	Self Management	2
OTHED 1761	Upper Extremity Rehabilitation (**Seminar Option)	2
OTHED 1777	Sensory Processing (*Seminar Option)	2
OTHED 1790	Capstone Development I	2
<b>Total</b>		<b>17</b>

#### Fall Quarter

OTHED 1738	Fieldwork II-B	12
<b>Total</b>		<b>12</b>

#### Winter Quarter

OTHED 1755	Administration and Management	3
OTHED 1766	Competency Course	1
OTHED 1785	Doctoral Internship	8
OTHED 1792	Capstone Development II	2
<b>Total</b>		<b>14</b>

#### Spring Quarter

OTHED 1701	Professional Development III	2
OTHED 1786	Doctoral Internship	6
OTHED 1794	Capstone Completion	1
OTHED 1795	Current Issues in Occupational Therapy Practice	2
OTHED 1799	Certification Examination Preparation Course	1
<b>Total</b>		<b>12</b>

## COURSE DESCRIPTIONS

### *CORED 1599E Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease. 1 credit

*OTHED 1501 Professional Development I*

This is the first in a series of three courses in which the student will acquire the understanding and values of becoming a professional, embracing the ethics and standards of occupational therapy, and realizing OT's scope of practice in this state and nationally. Attendance at the Illinois OT Association annual conference and the development of each student's individualized learning plan is also included as a part of this course.

3 credits

*OTHED 1503 Movement for Occupation*

The interrelationships between structural design and functional capabilities of the human body for use in the enactment of occupational performance will be provided in this course. Principles from anatomy, neuromotor control, and kinesiology principles will be highlighted in relation to their influence on daily task performance and purposeful activities.

3 credits

*OTHED 1504 Movement Skills Lab*

This lab course emphasizes the mastery of basic movement skills often used in occupational therapy practice. The assessment of joint range of motion and muscle strength, and the acquisition of certain movement skills, such as transfers and basic neurorehabilitation techniques, will be highlighted.

1 credit

*OTHED 1505 Neuroscience for Occupation*

This course provides students with an essential knowledge base of neuroscience for understanding the ways in which the principal structural components, corresponding functions of the nervous system, and neurological dysfunction impact human occupation. Specific emphasis will be placed on the integrated influences of the autonomic nervous system, sensory processing, motor control, emotion and behavior control, and cognitive and executive functions on occupational performance.

3 credits

*OTHED 1510 Critical Analysis of Evidence*

This course provides content foundational to understanding and applying current research that affects practice and the provision of occupational therapy services. The importance of research, analysis of current professional literature, understanding and interpreting basic research methodologies / designs will be highlighted. Choosing an area of research focus, developing appropriate questions, and beginning the literature review will be emphasized.

3 credits

*OTHED 1512 Research Project Development*

Self-directed learning is emphasized in the development of beginning research skills for small group research projects. The development of a research proposal, including the introduction, research questions, research design, and anticipated outcomes will result in a completed project submitted for institutional review board approval.

3 credits

*OTHED 1520 Occupation*

This course provides students with a thorough foundation for understanding the complex nature of occupation and its contribution to the creation of one's identity and roles, both personal and societal. Occupational science, meaningful activity, and the essential historical tenets of occupational therapy are emphasized using current and historical research and literature.

3 credits

*OTHED 1530 Theoretical Foundations of Occupational Therapy*

This course provides the learner with philosophical assumptions, theories, models of practice and frames of reference that are central to occupation-focused therapy. Using the work of OT scholars, including the Slagle lecturers, students will actively engage in reading, discussion, composition, and application of OT theories to one's life and emerging practice as an occupational therapist.

3 credits

*OTHED 1535 Conceptual Approach to Conditions*

This course addresses an approach to conceptualizing the different types of human conditions that often precipitate the need for occupational therapy services. Developmental, medical, neurological, orthopedic, and psychiatric categories of conditions will be explored with emphasis placed on the conceptual considerations which guide the identification and evaluation process given a client's occupational needs.

3 credits

*OTHED 1540 Occupational Therapy Process: Foundations*

This course underscores the importance of the occupational therapy process for enacting the practice of OT. Students will acquire an in-depth understanding of the OT Intervention Process Model and the OT Practice Framework upon which to build future occupational therapy practice.

2 credits

*OTHED 1545 Occupational Therapy Process: Children*

This course emphasizes the application of occupational therapy models of practice for the implementation of the OT process. Goal writing, documentation, assessments, and intervention approaches will be highlighted for practice with infants, children and adolescents. Critical reasoning,

prioritization of developmental considerations, family systems, and occupation-based practice will be stressed.  
4 credits

*OTHED 1547 Occupational Therapy Process: Adults*

This course emphasizes the application of occupational therapy models of practice for assessment and intervention of adults of all ages. Goal writing, documentation, assessments, and intervention planning will be highlighted for practice with adults who have occupational dysfunction. Critical reasoning, issues of health and disability, adult roles, and occupation-based practice will be stressed.  
4 credits

*OTHED 1549 Occupational Therapy Process: Psychosocial*

This course emphasizes the application of occupational therapy models of practice for assessment and intervention of adults of all ages who have psychosocial dysfunction. Goal writing, documentation, assessments, and intervention planning will be highlighted for practice with adults who have occupational dysfunction. Critical reasoning, management of mental illness, and occupation-based practice will be highlighted.  
4 credits

*OTHED 1550 Therapeutic Communication*

This course provides students with an in-depth inquiry into the intentional relationship and the essential dimensions of utilizing communication therapeutically. The intentional relationship, therapeutic use of self, and the critical skills of interviewing, actively listening and responding to others will be emphasized for developing the occupational profile and serving clients across the lifespan. The learner will develop self-awareness and empathy to support the use of oneself as an artful, skillful professional. Interviewing, narrative, therapeutic relationship-building, and the creation of the occupational profile for practice are highlighted.  
3 credits

*OTHED 1555 Analysis of Occupations*

This course emphasizes the development of the unique analytic skills occupational therapists bring to practice in task and activity analyses for designing and implementing occupations for their clients. The use of everyday activities, varied media, and the ability to up- and down-grade purposeful daily life occupations will be highlighted.  
3 credits

*OTHED 1601 Professional Development II*

This is the second of three courses in which the student will deepen their understanding of being an occupational therapy professional. This course is positioned between the Level II Fieldwork rotations to afford students an opportunity to explore issues of leadership, ethical dilemmas, and

professional responsibility. Attendance at the national AOTA annual conference may also be included as a part of this course.  
3 credits

*OTHED 1610 Research Project Implementation*

Self-directed learning builds upon work completed in prerequisite research courses to implement student research studies and data collection. Institutional review board approval initiates the processes of subject recruitment, data collection efforts, and the initial analysis of results.  
3 credits

*OTHED 1612 Research Project Synthesis*

Results from the previous research coursework are subjected to descriptive or statistical analysis and integrated with current literature in occupational therapy. Completed projects are presented in poster format for peer review.  
3 credits

*OTHED 1614 Data-based Decision Making*

This course will prepare students to use and apply knowledge from their research projects and other current occupational therapy sources for translation to clinical practice and upcoming Capstone projects. Students will read current and relevant literature and apply knowledge to contextual scenarios.  
2 credits

*OTHED 1630 Needs Assessment*

This course is the first of three courses focused on program development within occupational therapy practice. As a first essential step, identifying and assessing the need for a specific program within an existing or emerging area of practice provides the foundation upon which new and innovative programs may be constructed. Select approaches and methods will be provided for students to learn and integrate into their program development coursework which follows.  
2 credits

*OTHED 1632 Program Development*

This is the second of three courses related to program development within occupational therapy practice. Students work in small groups to develop a realistic model for service provision within an agency or organization, private clinic, or community setting. Emerging and non-traditional areas of practice are emphasized.  
3 credits

*OTHED 1635 Fieldwork Preparation I*

This course introduces the student to Level II clinical education including its goals and objectives, the types of educational experiences provided and the expectations for student participation. Students will focus on their

professional behaviors and their responsibilities in relation to supervisory and client-therapist relationships in the clinical setting.

1 credit

*OTHEd 1636 Fieldwork II-A*

This rotation is comprised of supervised field experience with clients and/or client groups who exhibit a variety of medical, developmental, or psychosocial conditions. This rotation emphasizes the development of disciplined, higher-level critical reasoning skills necessary to plan and provide occupation-based and occupation-focused services.

6 credits

*OTHEd 1637 Fieldwork II-A*

This course follows immediately OTHED 1636: Fieldwork II-A and continues the supervised field experience with clients and/or client groups who exhibit a variety of medical, developmental, or psychosocial conditions. This rotation emphasizes the development of disciplined, higher-level critical reasoning skills necessary to plan and provide occupation-based and occupation-focused services.

6 credits

*OTHEd 1645 Occupational Therapy Practice: Children*

This course focuses on the application and synthesis of OT practice with infants, children, and adolescents across varied practice settings. Case-based and authentic methods are used to enhance students' evaluation and intervention skills for practice. This course is offered in both the summer and fall quarters, and is held concurrently with OTHED 1646: Fieldwork I-A for experiences with children.

4 credits

*OTHEd 1646 Fieldwork I-A*

This course centers on guided learning experiences in school, clinic, home, or community settings that serve infants, children or adolescents. Students obtain opportunities to observe, evaluate and participate in intervention with children under the guidance of and mentoring from an on-site supervisor. This course is offered in both summer and fall quarters, and is held concurrently with OTHED 1645: Occupational Therapy Practice: Children.

1 credit

*OTHEd 1647 Occupational Therapy Practice: Adults*

This course focuses on the application and synthesis of OT practice with adults and seniors across varied practice settings. Case-based and authentic methods are used to enhance students' evaluation and intervention skills for practice. This course is offered in both the summer and fall quarters, and is held concurrently with OTHED 1648: Fieldwork I-B for experiences with adults.

4 credits

*OTHEd 1648 Fieldwork I-B*

This course centers on guided learning experiences in hospital, clinic, home, or community settings that serve adult clients. Students obtain opportunities to observe, evaluate and participate intervention with the adult population with guidance and mentoring from an on-site supervisor. This course is offered in both summer and fall quarters, and is held concurrently with OTHED 1647: Occupational Therapy Practice: Adults.

1 credit

*OTHEd 1649 Occupational Therapy Practice: Psychosocial*

This course focuses on the application and synthesis of OT practice with persons who have psychosocial dysfunction or mental illness across varied practice settings. Case-based and authentic methods are used to enhance student evaluation and intervention skills for practice. Students may concurrently take OTHED 1652: Fieldwork I-C with this course.

4 credits

*OTHEd 1650 Activities of Daily Life*

This course emphasizes the importance and value of personal and complex or instrumental activities of daily living across the lifespan. Selected assessment procedures, intervention techniques, and field experiences are offered as learning opportunities. The importance of occupations within one's daily habits and routines, and the use of adaptive equipment, the application of seating and positioning, and community access and mobility are included.

2 credits

*OTHEd 1651 Group Process*

This course focuses on the ways in which groups are used in occupational therapy practice across different settings and with a variety of client populations. This lab course emphasizes the theoretical approach, design, and implementation of groups while highlighting issues related to the phases of group development, establishing cohesion, managing conflict, and the application of interpersonal and therapeutic skills in group contexts. Students may concurrently take OTHED 1652: Fieldwork I-C with this course.

3 credits

*OTHEd 1652 Fieldwork I-C*

This course centers on guided learning experiences in hospital, clinic, home, or community settings that serve clients with psychosocial dysfunction. Students obtain opportunities to observe, evaluate and participate in intervention with guidance and mentoring from an on-site supervisor. This course is offered in both summer and fall quarters, and is held concurrently with OTHED 1649: Occupational Therapy Practice: Psychosocial or OTHED

1651: Group Process.  
1 credit

*OTHED 1655 Occupational Therapy Leadership*

This course examines the evidence bases for leadership roles and responsibilities in occupational therapy. The values, approaches, and importance of guiding change based on strong vision and mission are highlighted. Advocacy is emphasized as part of occupational therapy leadership.  
3 credits

*OTHED 1661 Occupational Therapy for Upper Extremity Function*

This course highlights occupation-focused and occupation-based approaches to occupational therapy intervention for enhancing upper extremity function impacted by certain orthopedic and neurologic conditions. The inclusion of preparatory interventions, such as the design and application of orthotic devices and physical agent modalities, are included in this course.  
3 credits

*OTHED 1670 Disability and Policy*

This course will analyze contemporary concepts, issues, and legislation surrounding disability. The course will review key definitions of disability within the context of significant models and various methodological approaches. Emphasis will be placed on the public policy issues that shape them.  
2 credits

*OTHED 1680 Educational Strategies in Occupational Therapy*

This course explores the processes and practices of education in professional and academic settings for occupational therapy. The theoretical foundations of teaching and learning, and the varied educational roles of occupational therapists will be highlighted. Students will apply course concepts to the development of their individual model of teaching and learning, and the ways in which occupational therapists collaborate, consult, and educate others in their practice settings.  
2 credits

*OTHED 1701 Professional Development III*

This is the third of three courses in which the student explores issues related to professionalism and becoming part of a “doctoring profession”. This course is positioned after the completion of the doctoral internship in the last quarter of the program. Students will construct goals and plans for continued professional development and prepare for obtaining positions as occupational therapy professionals.  
2 credits

*OTHED 1716 Professional Writing*

This course prepares the student to write and publish professional and scientific papers. The course covers the preparation of manuscripts, style and format, citation methods, peer review processes, and the ethics of professional writing.  
2 credits

*OTHED 1720 Occupational Science (\*Seminar Option)*

This seminar will provide a comprehensive examination into the current literature for the discipline of occupational science in occupational therapy and other professional inquiry. Applications to occupational therapy practice and scholarship will be explored.  
2 credits

*OTHED 1722 Recovery and Occupation (\*\*Seminar Option)*

This seminar will provide a comprehensive exploration of the concepts that lie at the core of the recovery model and their relationship to the guiding principles of occupational therapy practice. Coursework will explore strategies for uniting occupation and evidence-informed approaches for supporting mental health and recovery processes.  
2 credits

*OTHED 1725 Ergonomics and Universal Design (\*Seminar Option)*

This seminar examines the biomechanical design and modification of equipment, machines, furniture, and tools one uses in daily life for the best person-environment fit. It emphasizes the importance of appropriate, safe, and efficient designs for environmental factors to prevent or reduce musculoskeletal strain or disorders.  
2 credits

*OTHED 1730 Program Evaluation*

This is the third course in a series of three courses on program development. As an essential and often overlooked step, evaluating the strengths and implications of a newly developed program from the perspectives of the consumers, organization, and other parties validates the efficacy of the program for intended recipients of the program. Select approaches will be provided for students to learn and integrate program evaluation methods and apply them to group projects.  
2 credits

*OTHED 1732 Intellectual and Developmental Disabilities (\*\*Seminar Option)*

This seminar is an application of the occupational therapy process with adults with intellectual and developmental disabilities. Resources of evidence-based and research literature, as well as the role of occupational therapy with

underserved populations, will be highlighted.  
2 credits

*OTHED 1735 Fieldwork Preparation II*

This course is the second of two courses designed to prepare the student for Level II clinical practice and further prepares the student the attitudes required for the therapeutic process. Focus will be placed on professional behaviors and attitudes that impact the clinical experience and their future professional careers.  
1 credit

*OTHED 1738 Fieldwork II-B*

This rotation is comprised of supervised field experience with clients and/or client groups who exhibit a variety of medical, developmental, or psychosocial conditions. This rotation emphasizes the development of disciplined, higher-level critical reasoning skills necessary to plan and provide occupation-based and occupation-focused services. Students are supervised by registered occupational therapists with a minimum of one year of experience.  
12 credits

*OTHED 1740 School-based Practice (\*\*Seminar Option)*

The purpose of this seminar is to prepare occupational therapy students to provide effective school-based services. This course will emphasize student-centered services, problem solving models, team collaboration, and evidence-based intervention strategies. In addition, students will develop an understanding for school legislation at the federal, state, and local levels and understand how policy influences OT service delivery in schools.  
2 credits

*OTHED 1744 Cognition and Executive Functioning (\*Seminar Option)*

This seminar examines in depth the neurobehavioral foundations of thinking, reasoning, decision-making and other aspects of executive functioning utilizing the most current evidence in occupational therapy and related fields. The effect of specific neurologic disorders and implications for occupational therapy practice will be explored.  
2 credits

*OTHED 1746 Neurorehabilitation (\*Seminar Option)*

This seminar will provide the student with a deeper understanding of adult neurological rehabilitation. The main focus of this course will be related to the ways in which motor and cognitive functions influence occupational performance. This course will provide the student with opportunities to further explore occupation-based approaches to evaluation and intervention.  
2 credits

*OTHED 1748 Gerontology (\*\*Seminar Option)*

This seminar will utilize current evidence and research to explore occupational therapy practice with older adults. The course will also include an application of the OT process with older adults, especially those at risk for or who have dementia. The factors which impede successful engagement in occupation for older adults, as well as opportunities to grade and adapt the environment, activities, and occupations, will be emphasized.  
2 credits

*OTHED 1750 Self Management*

This course will provide students with the background, evidence bases, and approaches to self-management available for occupational therapy practice for clients across the lifespan. The content will build on knowledge from previous practice, education, and program development courses.  
2 credits

*OTHED 1755 Administration and Management*

This course provides students with the foundational knowledge and skills to assume administrative or management roles and responsibilities. The topics of strategic planning, business plans, legal and reimbursement issues, departmental budgeting, inventory management, supervision and personnel management are covered. Links to leadership are addressed.  
3 credits

*OTHED 1761 Upper Extremity Rehabilitation (\*\*Seminar Option)*

This seminar focuses on advanced evaluation and intervention strategies for the remediation of physical limitations that are primarily musculoskeletal in nature. Emphasis is placed on the process of orthotic fabrication in the context of occupation-based intervention. Various mechanisms and methods of mobilization of tissues will be introduced and practiced on specific client cases.  
2 credits

*OTHED 1766 Competency Course*

This course is placed after successful completion of all coursework and Level II fieldwork experiences, but prior to the Doctoral Internship. Students will demonstrate mastery of occupational therapy course content to date by successful completion of the NBCOT® practice exam, and competent construction of an occupational therapy portfolio assignment.  
1 credit

*OTHED 1777 Sensory Processing (\*Seminar Option)*

This seminar focuses on the application of the theory of sensory integration as well as the current evidence and research on the neurobehavioral foundations of sensory processing. The evaluation and intervention processes for

individuals with sensory processing dysfunction will be highlighted.  
2 credits

#### *OTHEd 1785 Doctoral Internship*

This internship is divided between two quarters to ensure that each student completes 16 full weeks of off-campus doctoral rotation in an organization or facility in which they are creating and implementing their Capstone projects. While largely independent work is required, each student receives individual supervision and guidance from both a faculty member as well as on-site mentor.  
8 credits

#### *OTHEd 1786 Doctoral Internship*

This course is the second of two courses for the Doctoral Internship, or 16 weeks of off-campus doctoral rotation. Independent but mentored work on the part of the student is an essential component of this course.  
8 credits

#### *OTHEd 1790 Capstone Development I*

This course will focus on the conceptualization and initial development of the student's scholarship or Capstone project proposal. Each student will construct a proposed plan for their work and determine the site(s) for receipt of their project. A timetable for each step of the project will also be articulated. Students will present an oral defense of their proposed Capstone projects for implementation during the Doctoral Internship.  
2 credits

#### *OTHEd 1792 Capstone Development II*

The purpose of this course is to provide the student with the time and individualized guidance needed to refine their Capstone project, including the goals, methods, supports, and to anticipate and prevent potential constraints prior to initiation of the Doctoral Internship.  
2 credits

#### *OTHEd 1794 Capstone Completion*

This course emphasizes the completion of each student's Capstone project. Each student will be required to defend their project, prepare their project for final dissemination, including publication and presentation, and ensure that, as appropriate, the project is implemented at the collaborating site(s) after the Doctoral Internship rotation.  
1 credit

#### *OTHEd 1795 Current Issues in Occupational Therapy Practice*

This course focuses on contemporary issues in various areas of practice at the state, regional, national, and international levels. Opportunities for professional responsibility and

action will be highlighted.  
2 credits

#### *OTHEd 1799 Certification Examination Preparation Course*

This course provides the student with a formalized approach to studying for and developing the skills and confidence necessary for taking the National Board for Certification in Occupational Therapy examination.  
1 credit

## STUDENT ACADEMIC POLICIES

### **Academic Progress**

The academic standing of a student is determined by the student's cumulative grade point average. The student must pass all courses and maintain a cumulative grade point average of 3.0 or higher to have achieved satisfactory academic progress. A student must satisfactorily complete all didactic courses and academic requirements from the preceding quarter.

### **Cardiopulmonary Resuscitation (CPR) Certification**

Students are responsible for maintaining current CPR certification in Basic Life Support (BLS) for Health Care Providers while enrolled in the Program.

## FACULTY

### **Gifty Abraham, O.T.D., OTR**

University of Illinois at Chicago  
College of Applied Health Sciences  
Assistant Professor

### **Kimberly A. Bryze, Ph.D., OTR**

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College of Education  
Director and Professor

### **Glen S. Cotton, O.T.D., OTR**

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College of Applied Health Sciences  
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### **Susanne A. Higgins, O.T.D., OTR**

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### **Catherine Killian, O.T.D., OTR**

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### **Anne Kiraly-Alvarez, O.T.D., OTR**

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Assistant Professor

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**Divya Sood, O.T.D., OTR**

Washington University  
School of Medicine  
Associate Professor

**Sarah Zera, O.T.D., OTR**

University of Illinois at Chicago  
College of Applied Health Sciences  
Assistant Professor



# CLINICAL PSYCHOLOGY PROGRAM

## MISSION

The Midwestern University Doctor of Psychology (Psy.D.) in Clinical Psychology Program educates and trains students to be Health Service Psychologists in the general practice of evidence-based clinical psychology serving diverse populations.

## AIMS

The Program's overall goal is to educate and train students in the practitioner-scholar training model for the practice of clinical psychology. In service of this goal the Program has four broad educational aims:

1. Students acquire theoretical and scientific knowledge in the entry-level practice of clinical psychology working with diverse individuals and groups.
2. Students develop and utilize a strong set of clinical skills, behaviors, and attitudes that reflect the highest ethical and professional standards in the entry-level practice of clinical psychology working with diverse individuals and groups.
3. Students engage in research and evaluation, contribute to the body of knowledge, and evaluate clinical outcomes using empirically based information and methods.
4. Students develop an appreciation for the value of interdisciplinary collaboration and practice and are able to work effectively with professionals from other healthcare disciplines.

## ACCREDITATION

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle St., Suite 7-500, Chicago, IL 60604-1413; 800/621-7440. The Psy.D. degree program is accredited by the American Psychological Association. Accreditation information can be obtained from the Office of Program Consultation and Accreditation, American Psychological Association, 750 First Street NE; Washington, DC 20002-4242. Phone: 202/336-5979; TDD/TTY: 202/336-6123. Website: <http://www.apa.org/ed/accreditation/index.aspx>.

## DEGREE DESCRIPTION

The Doctor of Psychology degree is designed to be a professional degree similar to the doctoral degrees provided in medicine, law, pharmacy, physical therapy, and dentistry. The Psy.D. is considered the degree of choice for persons interested in becoming a practitioner-scholar when pursuing a career in clinical psychology. The program emphasis is on the development of essential diagnostic, therapeutic, and consultative skills for the practice of clinical psychology.

The program of study follows the recommendations of the American Psychological Association (APA) for broad and general education and training for Health Service Psychologists. Students are educated and trained in the current body of knowledge in the following discipline-specific domains: the history and systems of psychology; affective aspects of behavior; biological aspects of behavior; cognitive aspects of behavior; developmental aspects of behavior; social aspects of behavior; and an advanced integration of these areas. Knowledge of research and quantitative methods is also necessary, including research methods, quantitative methods of data analysis, and psychometric theory.

The program centers on the development of appropriate competencies reflected in the American Psychological Association (APA) Standards of Accreditation (SoA; APA, 2015). There are nine required profession-wide competencies. The program has key points in the curriculum targeted to assess progress in attaining these competencies. These include competencies in Research, Ethics and Legal Standards, Individual and Cultural Diversity, Professional Values, Attitudes and Behavior, Communication and Interpersonal Skills, Assessment, Intervention, Supervision, and Consultation and Interprofessional/Interdisciplinary Skills.

*Research Competency:* The research competency rests on the student's understanding of research, research methods, and techniques of data collection and analysis. Students will also understand the reciprocal relationship between science and clinical practice. Students are expected to be able to use this knowledge to critically evaluate and solve novel problems, to independently formulate research or other scholarly activity

of sufficient quality and rigor to potentially contribute to the scientific or professional knowledge base, and to disseminate such research or scholarly activity via professional publications and presentations at the local, regional or national level.

*Ethics and Legal Standards Competency:* This competency includes having a working knowledge of ethical, legal and professional standards and guidelines at the organizational, local, state, and federal level. Students are expected to act in accordance with those standards and guidelines and conduct themselves in an ethical manner in all professional activities. This competency also includes the ability to recognize ethical dilemmas when they arise and to apply ethical decision making in order to resolve those dilemmas.

*Individual and Cultural Diversity Competency:* This competency stresses that students will develop the ability to conduct all of their professional activities with sensitivity to human diversity and will demonstrate an ability to work effectively with diverse individuals and groups. Students must demonstrate knowledge, awareness, sensitivity and skills when working with diverse individuals and communities who embody a variety of cultural and personal backgrounds and characteristics. As such, students must demonstrate an understanding of their own personal/cultural history, attitudes and biases that may affect their understanding and interaction with others, have knowledge of the current theoretical and empirical knowledge base related to addressing diversity in professional activities, and show the ability to integrate this awareness and knowledge of individual and cultural differences in the conduct of their professional roles.

*Professional Values, Attitudes and Behavior Competency:* This competency is evidenced by the ability to demonstrate an adherence to the professional values, attitudes and behaviors that define the profession of psychology. This includes honesty, integrity and personal responsibility, as well as concern for the welfare of others. It includes one's professional identity as well as deportment in interactions with clients and with others, including peers, supervisors, faculty, and other professionals. Students are expected to demonstrate openness and responsiveness to feedback and supervision. Professionalism also includes the capacity for self-reflection, self-care and an appreciation of lifelong learning.

*Communication and Interpersonal Skills Competency:* Communication and Interpersonal Skills are foundational competencies for health service psychology. This competency requires a demonstration of the ability to relate effectively and meaningfully with a wide range of individuals, groups and communities. This includes the ability to form and maintain productive and respectful relationships with clients, peers, supervisors, and other professionals. This competency

also entails the ability to produce and comprehend nonverbal, oral and written communication and to have a thorough grasp of professional language and concepts. Students are expected to demonstrate effective interpersonal skills and to be able to manage difficult communication or conflict.

*Assessment Competency:* The assessment competency involves the evidence-based assessment and diagnosis of problems, capabilities and issues associated with individuals, groups, or organizations. It includes knowledge of principles of measurement and psychometrics. This competency also requires the knowledge and skills necessary for effective selection, administration, scoring and interpretation of assessment measures appropriate to the specific purpose or goals of the assessment and the individual being assessed. The assessment competency also requires an ability to synthesize multiple sources of data to develop appropriate diagnoses, conceptualizations and treatment plans and to communicate that information in an effective oral and written manner to a range of audiences.

*Intervention Competency:* The intervention competency requires students to demonstrate the knowledge, skills and attitudes necessary to conduct evidence-based interventions with individuals, families, groups and other systems. This competency encompasses the ability to establish and maintain effective therapeutic relationships, develop case formulations and implement treatment plans using relevant theory and research for effective clinical decision making. It includes the ability to monitor and evaluate the effectiveness of chosen intervention approaches and to appropriately revise treatment strategies as necessary and appropriate.

*Supervision Competency:* The supervision competency requires students to be able to demonstrate a knowledge of supervision models and practices. This includes having knowledge of how trainees and clinicians develop into skilled professionals, knowledge of the procedures and processes of effective supervision, and knowledge of how to effectively evaluate those skills in others.

*Consultation and Interprofessional/Interdisciplinary Competency:* The consultation and interprofessional/interdisciplinary competency requires students to demonstrate knowledge of consultation models and practices, and to demonstrate respect for the roles and perspectives of other professions. It involves the ability to function in interdisciplinary contexts, and interact collaboratively with professionals in other disciplines in order to seek or share knowledge, address problems, promote effective professional activities and enhance outcomes.

### **Program Philosophy**

The Doctor of Psychology in Clinical Psychology Program follows the practitioner-scholar training model that was accepted by the American Psychological Association at the Vail Conference (1973). This model recognizes the ongoing need in society for expertly trained practitioners in the field of clinical psychology. The practitioner-scholar philosophy dictates that competent practitioners are required to have an extensive understanding of the theoretical principles and empirical bases of the clinical practice of psychology, and the ability to utilize the knowledge in specific clinical situations. The program's goal is to educate and train individuals to enter careers as Health Service Psychologists emphasizing the delivery of direct psychological services and consultation. Relevant theory, research, and field experiences are integrated toward the development of competent and ethical Health Service Psychologists who are respectful of individual and cultural differences in the provision of evidence-based psychological services.

### **Program Length**

The Psy.D. Program is designed to be completed in five years. Full-time students will complete four years of coursework, clerkship, and practicum experiences. This is followed by a one-year full-time internship and the satisfactory completion of the dissertation. A total of at least 231.5 quarter hours is required for the 5-year Psy.D. degree. However, students may elect to complete the program with up to 275.5 credits. A four-year option is available to students entering the program with a prior master's degree or other qualified students. The four-year option requires a minimum of 212 credits. Those electing the Child and Adolescent Emphasis may require an additional 15 credits. Some evening classes or weekend courses may be scheduled. The maximum allotted time for completion of the program is seven years. Students who exceed the maximum time to completion will be referred to the Student Academic Review Committee and may be dismissed by the program.

### **Master of Arts in Clinical Psychology Degree**

Students are only admitted into the Psy.D. Program. There is no terminal Master of Arts degree program. Students electing to receive the M.A. degree must have successfully completed all of the required 1500 and 1600 level courses, clerkship, and practicum experiences for a minimum of 105 credit hours.

### **Clerkship**

The Psy.D. Program offers a number of supervised pre-practicum clinical and clinical research experiences in the first year of study. All students are required to complete two quarters of clerkship. Under supervision of program faculty, students work at training sites in a variety of clinical and/or clinical research roles appropriate for their level of training. Students can choose clerkship experiences from a variety of opportunities. Final selection for participation in a particular

clerkship rests with the Program Director in consultation with the clerkship supervisors. For more information, refer to the current Clinical Psychology Program Clinical Training Manual.

### **Clinical Practicum**

Students enter practicum training if they are making satisfactory progress in the program and receive approval of the Program Director, Director of Training, and the Academic Review Committee. The Director of Training assists students in the application process for practicum placements to facilitate an appropriate match between training site characteristics and students' interests. Practicum is a field experience at an off-campus clinical training site for a minimum of 9 months and up to 12 months that are consecutive. Practicum training is completed at numerous hospitals, agencies, and organizations throughout the Chicagoland area. The specific clinical focus of the experience varies according to the student's needs, interests, services provided at the training site, and availability of practicum sites. Students typically work approximately 16 to 24 hours per week in a clinical setting. The practicum experiences in diagnostic, therapy, and advance total approximately 1,800 hours over three years. Typically, the student completes a diagnostic practicum in the second year of study, a therapy practicum in the third year, and an advanced practicum in the fourth year. Practicum placements may require work in the summer months, over holiday periods, and during breaks in the academic calendar. All students must successfully complete practicum experiences in the second, third and fourth years of study. Students must also successfully complete a concurrent practicum seminar on campus in the second, third, and fourth year of study. In order to receive credit for practicum students must pass both Practicum and Practicum Seminar Blocks in which they are enrolled. For more information, refer to the current Clinical Psychology Practicum Training Manual and the Practicum Search Manual.

### **Internship**

The pre-doctoral internship is a 2,000-hour requirement at an approved clinical training site full-time over a 12-month period or half-time over a 24-month period. Internship is typically a year-long sequentially organized full-time training experience. The student must successfully complete all four quarters of the internship at one site to receive credit for this full time training experience. Students completing half-time internships will need to successfully complete all eight quarters of the internship to receive credit for this training experience. The internship is designed to provide intensive advanced clinical training that builds upon previous coursework and practicum experiences. The internship is a critical component of the Psy.D. Program and cannot be waived. Students apply for the internship during the fourth year of the program. Students must satisfactorily complete all

required coursework, clerkship, and practicum experiences prior to going on internship. Students must also satisfactorily propose the Dissertation prior to applying for internship. Students choosing the four-year option and those with a previous Master's degree from another program may petition to apply for internship prior to their fourth year of the program. Final decisions about eligibility to apply for internship rest with the Program Director, Director of Training, and the Clinical Psychology Academic Review Committee. Students applying for an internship enter a national match process with training sites across the country. Students may expect to travel some distance during the internship interview process. The internship is a stipend position. For more information, refer to the current Clinical Psychology Internship Search Manual.

### Dissertation

The successful completion of a Dissertation is required for graduation. This is intended as a scholarly work that permits students an opportunity to enhance their knowledge about a particular clinical area. A committee of faculty members,

including a designated Dissertation Chair, will assist with this process. Students will be enrolled in a sequence of courses over the duration of the program to facilitate their development of the project. In the second year, students will initiate development of a proposal for their Dissertation. Students must present the proposal to their committee for approval before the Dissertation is implemented. The student then completes the project and submits a written document detailing the Dissertation. Each student must present an oral defense of the Dissertation upon its completion. Following a successful defense, the student must provide the program with copies of the final Dissertation for binding. The Dissertation takes a minimum of 12 months to complete. With the Program Director's approval, students needing additional time beyond the internship year to complete the Dissertation must register for PSYCD 1990-1999 Dissertation Post-Internship I - X, as needed, a 0.5 credit hour course. For more information regarding Dissertation policies and requirements refer to the current Clinical Psychology Program Dissertation Manual.

### Student Admissions, Outcomes, and Other Data

**Time to Completion for all students entering the program**

Outcome	Year in which Degrees were Conferred												Total											
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018													
Total number of students with doctoral degree conferred on transcript	12	5	10	26	19	17	18	5	15	20	22	169												
Mean number of years to complete the program	4	4.2	4.7	4.9	5.1	5.1	5.4	4.8	5.1	5.1	5.4	4.9												
Median number of years to complete the program	4	4	5	5	5	5	5	5	5	5	5	5												
<b>Time to Degree Ranges</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>								
Students in less than 5 years	12	100	4	80	4	40	9	35	6	32	4	24	3	17	2	40	1	7	0	0	0	0	45	27
Students in 5 years	0	0	1	20	5	50	11	42	9	47	8	47	8	44	2	40	12	80	15	75	16	72	87	51
Students in 6 years	0	0	0	0	1	10	4	15	1	5	4	24	4	22	1	20	2	13	2	10	3	14	22	13
Students in 7 years	0	0	0	0	0	0	2	7.7	3	16	1	6	2	11	0	0	0	0	3	15	3	14	14	8
Students in more than 7 years	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	1	1

For information regarding admissions policies that allow students to enter with credit for prior graduate work, please see the [Transfer of Credit](#) section of the Midwestern University Catalog, Clinical Psychology Program.

**Internship Placement - Table 1**

Outcome	Year Applied for Internship																					
	2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students who obtained APA/CPA-accredited internships	1	6	2	14	3	16	0	0	1	6	1	8	1	10	10	63	13	68	12	71	17	90
Students who obtained APPIC member internships that were not APA/CPA-accredited (if applicable)	16	94	10	71	15	79	20	95	15	94	11	85	9	90	6	37	6	32	5	29	2	10
Students who obtained other membership organization internships (e.g. CAPIC) that were not APA/CPA-accredited (if applicable)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Students who obtained internships conforming to CDSPP guidelines that were not APA/CPA-accredited (if applicable)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Students who obtained other internships that were not APA/CPA-accredited (if applicable)	0	0	1	7	1	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Students who obtained any internship	17	100	13	93	19	100	20	95	16	100	12	92	10	100	16	100	19	100	17	100	19	100
Students who sought or applied for internships including those who withdrew from the application process	17	-	14	-	19	-	21	-	16	-	13	-	10	-	16	-	19	-	17	-	19	-

**Internship Placement - Table 2**

Outcome	Year Applied for Internship																					
	2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students who sought or applied for internships including those who withdrew from the application process	17	-	14	-	19	-	21	-	16	-	13	-	10	-	16	-	19	-	17	-	19	-
Students who obtained paid internships	15	88	13	93	18	95	20	95	16	100	12	92	10	100	16	100	19	100	17	100	19	100
Students who obtained half-time internships* (if applicable)	1	6	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Program Costs**

Description	2018-2019 1 <sup>st</sup> -year Cohort Cost
Tuition for full-time students (in-state)	\$32,547
Tuition for full-time students (out-of-state)	\$32,547
Tuition per credit hour for part-time students (if applicable enter amount; if not applicable enter "NA")	N/A
University/institution fees or costs	\$679
Additional estimated fees or costs to students (e.g. books, travel, etc.)	\$2,029

Tuition rates are subject to change each academic year.

**Attrition**

Variable	Year of First Enrollment																					
	2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students for whom this is the year of first enrollment (i.e. new students)	24	-	20	-	15	-	12	-	21	-	20	-	18	-	23	-	28	-	21	-	23	-
Students whose doctoral degrees were conferred on their transcripts	23	96	19	95	13	87	5	42	2	10	17	85	0	0	0	0	0	0	0	0	0	0
Students still enrolled in program	0	0	0	0	0	0	6	50	15	71	1	5	18	100	16	70	22	79	18	86	22	96
Students no longer enrolled for any reason other than conferral of doctoral degree	1	4	1	5	2	13	1	8	4	19	2	10	0	0	7	30	6	21	3	14	1	4

**Licensure**

Outcome	2008-2018
The total number of program graduates (doctoral degrees conferred on transcript) between 2 and 10 years ago	126
The number of these graduates (between 2 and 10 years ago) who became licensed psychologists in the past 10 years	99
Licensure percentage	79%

Per the recommendation of the American Psychological Association (APA), licensure information is calculated and presented for students two or more years post-graduation. Information regarding licensure rates is collected using the following methodologies:  
 Direct correspondence with program graduates  
 Systematic inspection of professional regulation websites

## ADMISSIONS

The Clinical Psychology Program considers applicants who possess the academic and professional promise necessary for development as competent, caring members of the healthcare community. The Program requires an interview with applicants before decisions are made concerning admission into the Program.

### Admissions Requirements

To be considered for admission within our competitive selection process, applicants must submit the following documented evidence:

1. Completion of a bachelor's degree from a regionally accredited college or university.
2. An overall undergraduate and graduate grade point average (GPA) of 3.000 on a 4.000 scale is required.
3. Completion of 18 semester hours or equivalent of prerequisite coursework in psychology with a grade of C or better including: Introduction to General Psychology, Human Growth & Development or Personality Theory, Abnormal Psychology, Statistics or Tests and Measurements.
4. Graduate Records Examination (GRE) general test scores using the Midwestern University institution code of 1769:
  - Scores will be accepted from tests taken no earlier than January 1, 2016.
  - For more information about the GRE, contact Educational Testing Services (ETS) at 609/771-7670 or 866/473-4373 or visit [www.ets.org/gre](http://www.ets.org/gre).
5. Demonstration of community service or extracurricular activities.
6. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences.
7. Oral and written communication skills necessary to interact with patients and colleagues.
8. Commitment to abide by Midwestern University's Drug-Free Workplace and Substance Abuse Policy.
9. Passage of the Midwestern University criminal background check.

### Application Process and Deadlines

1. **PSYCAS Application** Applicants are required to submit their applications to PSYCAS at <https://psycas.liaisoncas.com> by July 15, 2021. Please refer to the PSYCAS application instructions for specific details about completing the application, required documents, and processing time. Applicants are strongly encouraged to complete their PSYCAS application early in the cycle. Midwestern University operates on a rolling admissions basis where applications are reviewed throughout the admissions cycle.

2. **Letters of Recommendation** Applicants are required to submit a minimum of two letters of recommendation from professionals to PSYCAS (<https://psycas.liaisoncas.com>). The Office of Admissions will only accept letters of recommendation received directly from PSYCAS. Letters of recommendation should be written by professionals who know the applicant well (teachers, advisors, professional colleagues or supervisors). The applicant should refer to the PSYCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.
3. **GRE Scores** Applicants are required to submit official GRE general test scores directly to Midwestern University. The MWU institutional code for submitting scores is 1769. Only test scores earned during the previous five years (no earlier than January 1, 2016) and sent directly from the Educational Testing Service (ETS) will be accepted.
4. **Completed Applications** The Office of Admissions will send letters verifying receipt of PSYCAS applications with all required materials to all applicants who meet the minimum cumulative GPA of 3.0. The letters will also include instructions on checking the status of the required application materials online. All applicants must also submit official GRE general test scores to Midwestern University to complete their applications. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit completed applications with all required application materials will be considered for potential entrance into the Program.

Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address. All requests for application withdrawal must be made in writing via e-mail, fax, or letter to the Office of Admissions at:

Midwestern University  
Office of Admissions  
555 31st Street  
Downers Grove, IL  
(630) 515-6171  
(800) 458-6253  
[admissil@midwestern.edu](mailto:admissil@midwestern.edu)

### Interview and Selection Process

Completed applications are reviewed to determine an applicant's eligibility for interviews. Interviews are conducted on the Midwestern University campus during several days throughout the admissions cycle. The personal interview is the final step in the application process. The Admissions

Committee reviews the completed files of interviewed candidates and submits recommendations for admission to the Dean for final approval. The Dean, via The Office of Admissions, notifies applicants of admissions decisions.

### **Transfer of Credit**

To receive credit for coursework completed at other institutions prior to matriculation at Midwestern University, students must submit a Petition for Advanced Standing/Transfer of Credit Form and a course syllabus for each course the student is requesting to transfer. In addition, one official transcript must be submitted. All requests for Advanced Standing must be submitted prior to registration for the first quarter of the program. Requests will not be accepted after the student's first quarter in the program. The transfer of credit has the following conditions:

1. A maximum of 40 quarter hours, 32 trimester hours, or 27 semester hours, of credit for coursework completed prior to matriculation may be considered;
2. Transferred course credit is limited to graduate level courses in psychology or mental health from recognized, regionally accredited degree granting institutions;
3. Credit may be awarded for required courses completed from other doctoral programs;
4. Credit may only be awarded for courses in which a grade of B- or higher was attained;
5. Credit is not transferable for clerkship, practica or internship; (for more information refer to the current Clinical Training Manual)
6. Other courses that include a competency gateway may be considered for transfer of credit. This will be determined on a case by case basis. Furthermore, in order for any credit to be granted for a course that includes a competency gateway, a competency examination is required to determine satisfactory performance before transfer of credit will be granted.
7. Advanced Standing will only be granted for required courses. Advanced Standing will not be granted for MWU Clinical Psychology electives.
8. Credit can only be awarded for courses completed within a seven-year period before matriculation.

All Advanced Standing requests will be reviewed by the Chair of the Program's Education Committee, the Course Director of the Midwestern University course for which the student is requesting Advanced Standing, and/or the Program Director. If a course is accepted for credit, the equivalent Midwestern University course and Advanced Placement (AP) notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the MWU transcript or used in the MWU GPA calculation.

Students requesting, and receiving, Advanced Standing understand that this might have financial and scheduling implications throughout their time at MWU. While the Program will work with the student, it is the **STUDENT'S** responsibility to ensure they have enough credits to qualify for Financial Aid for any given quarter.

### **Reapplication Process**

Students who receive either denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, however, individuals contemplating reapplication should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

## **GRADUATION REQUIREMENTS**

The Master of Arts degree in Clinical Psychology (M.A.) is awarded if the following conditions are fulfilled by students in the Psy.D. Program:

1. Satisfactory completion of a minimum of **105** credit hours including all required courses (83 credits), Interprofessional Education course (1 credit), clerkships (2 credits), and practica and practicum seminars (21 credits).
2. Attainment of a cumulative grade point average of 3.000 or higher; and a minimum of B- or P in all required courses, seminars and practica.
3. Favorable recommendation for conferral of master's degree from the Clinical Psychology Program Academic Review Committee and the CHS Student Promotion and Graduate Committee.
4. Settlement of all financial accounts with the University.

To receive the Doctor of Psychology in Clinical Psychology (Psy.D.), the student must complete all requirements within seven calendar years of matriculation. To be eligible for graduation the student must meet the following requirements:

1. Satisfactory completion of a minimum of **231.5** credits consisting of all the required courses; (212 credits for the four-year option.)
2. Attainment of a cumulative grade point average of 3.0 or higher; and minimum of B- or P in all required courses, seminars and practica;
3. Satisfactory completion of the written Qualifying Examination and program-based competencies;
4. Satisfactory completion of an approved internship;
5. Satisfactory completion of a Dissertation, including a successful oral defense and the submission of a copy for binding;

6. Completion of all graduation clearance requirements as instructed by the Office of the Registrar;
7. Favorable recommendation for doctoral degree conferral from the Clinical Psychology Program Academic Review Committee and the CHS Student Promotion and Graduation Committee;
8. Settlement of all financial accounts with the University.

### Requirements for Full Time Study in Residence

A residency requirement must be satisfied as a condition of graduation. According to the American Psychological Association Standards of Accreditation (APA, 2015) students must meet the following requirements:

1. A minimum of 3 full-time academic years of graduate study (or the equivalent thereof) plus an internship prior to receiving the doctoral degree;
2. At least 2 of the 3 academic training years (or the equivalent thereof) within the program from which the doctoral degree is granted;
3. At least 1 year of which must be in full-time residence (or the equivalent thereof) at that same program. At this University this is defined as the successful completion of a minimum of twelve quarter hours per term for three consecutive quarters.

All enrolled students, including those enrolled with transfer credits, must meet or exceed the minimum residency requirements. All students must additionally complete all training experiences (clerkship, practica and a full-time predoctoral internship) during their residency in the Program.

## LICENSURE REQUIREMENTS

All clinical psychologists providing direct services to the public must be licensed or certified by the state or province in which they practice. Doctoral level licensure typically requires completion of a prescribed educational requirement, pre- and postdoctoral supervised experience and successful completion of the national Examination for Professional Practice of Psychology (EPPP) as well as specific state or provincial requirements.

Midwestern University's Clinical Psychology (Illinois) program meets or exceeds the educational requirement for licensure to practice as a clinical psychologist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North

Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

However, additional licensure requirements will vary from jurisdiction to jurisdiction. Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

For more information see the website of The Association of State and Provincial Psychology Boards (ASPPB) at [www.asppb.net](http://www.asppb.net).

*Special Note:* Licensure in California requires additional hours of coursework in the following areas: Human Sexuality (10 hours); Child Abuse and Reporting (7 hours); Spousal or partner abuse assessment, detection, and intervention (2 hours).

## CURRICULUM

The following curriculum applies to all students who matriculated in Fall 2020 or thereafter. For students who matriculated prior to Fall 2019, refer to the appropriate Midwestern University Catalog for the relevant curriculum listing.

Total Quarter Credits in the 5-year Professional Program: **231.5-275.5** Students electing the Child and Adolescent Emphasis may require an additional **15** credits. Students entering the program with advanced standing or otherwise electing the four-year option may complete the program in 4 years with a minimum of 212 credits. In this case the 4th year is eliminated and PSYCD 1811 - 1814 and PSYCD 1822 - 1825 are moved into the 3rd year.

The total number of quarter credits is dependent upon which, if any, elective courses are taken by the student.

With the Program Director's approval, students needing additional time during or beyond the internship year to complete the Dissertation must register for PSYCD 1921-1924 Dissertation Continuation I-IV or PSYCD 1990-1999 Dissertation Post-Internship I - X as needed, a 0.5 credit hour course, to complete the dissertation requirement.

*Note: The Clinical Psychology Program reserves the right to alter its curriculum however and whenever it deems appropriate.*



**First Professional Year:**

Total Quarter Credit Hours First Year: 46

**Fall Quarter**

CORED	1599H	Interprofessional Education I	1
PSYCD	1501	Professional Issues and Ethics	3
PSYCD	1504	Research Methods and Design	3
PSYCD	1505	Professional Development Seminar I	1
PSYCD	1515	Tests and Measurements	3
PSYCD	1520	Clinical Appraisal and Interviewing	3
PSYCD	1507	History and Systems	3
<b>Total</b>			<b>17</b>

**Winter Quarter**

PSYCD	1502	Life Span Development I	3
PSYCD	1506	Professional Development Seminar II	1
PSYCD	1510	Statistics I	3
PSYCD	1524	Intelligence Testing I	3
PSYCD	1582	Clerkship I	1
PSYCD	1525	Intelligence Testing II	3
<b>Total</b>			<b>14</b>

**Spring Quarter**

PSYCD	1503	Life Span Development II	3
PSYCD	1508	Research Methods II	3
PSYCD	1526	Personality Assessment I: Objective Techniques	3
PSYCD	1527	Personality Assessment II: Projective Techniques	2
PSYCD	1550	Biological Bases of Behavior	3
PSYCD	1583	Clerkship II	1
<b>Total</b>			<b>15</b>

**Second Professional Year:****Total Quarter Credit Hours Second Year: 59 - 65****Clinical Block: Fall, Winter and Spring Quarters (Summer Optional). Block hours billed across terms.**

PSYCD 1673 Diagnostic Practicum Credits: 15

PSYCD 1674 Diagnostic Practicum Seminar Credits: 6

PSYCD 1600 Diagnostic Practicum (Optional Summer Extension) Credits: 5

PSYCD 1601 Diagnostic Practicum Seminar (Optional Summer Extension) Credits: 1

**Total 21-27****Summer Quarter**

PSYCD 1611 Statistics II 3

PSYCD 1660 Cognitive-Affective Bases of Behavior 3

PSYCD 1669 Psychopathology I: Anxiety and Personality Disorders 3

**Total 9-15****Fall Quarter**

PSYCD 1620 Advanced Assessment 3

PSYCD 1640 Introduction to Neuropsychology 3

PSYCD 1654 Social and Cultural Bases of Behavior 3

PSYCD 1670 Psychopathology II: Depressive, Bipolar and Schizophrenia Spectrum Disorders 3

**Total 19****Winter Quarter**

PSYCD 1610 Diversity in Clinical Psychology 3

PSYCD 1636 Behavior Therapy 3

PSYCD 1671 Child Psychopathology 3

**Total 16****Spring Quarter**

PSYCD 1631 Cognitive Behavioral Theories and Approaches to Psychotherapy 3

PSYCD 1632 Psychodynamic Approaches to Psychotherapy 3

PSYCD 1680 Research Seminar: Integration of Science and Practice 2

**Total 15****Third Professional Year:**

Total Quarter Credit Hours Third Year: 45-63

**Clinical Block: Fall, Winter and Spring Quarters  
(Summer Optional) Block hours billed across terms.**

PSYCD 1773 Therapy Practicum	Credits: 15
PSYCD 1774 Therapy Practicum Seminar	Credits: 6
PSYCD 1700 Therapy Practicum (Optional Summer Extension)	Credits: 5
PSYCD 1701 Therapy Practicum Seminar (Optional Summer Extension)	Credits: 1
<b>Total</b>	<b>21-27</b>

**Summer Quarter**

PSYCD 1705 Family and Systems Theory and Application	3
PSYCD 1732 Supervision	2
PSYCD 1733 Consultation Models and Practice	2
Electives (Optional)	0-3
<b>Total</b>	<b>7-16</b>

**Fall Quarter**

PSYCD 1772 Advanced Psychotherapy	3
PSYCD 1742 Group Theory and Application	2
Electives (Optional)	0-3
<b>Total</b>	<b>12-15</b>

**Winter Quarter**

PSYCD 1708 Advanced Ethics	3
PSYCD 1766 Advanced Integration of Scientific Knowledge	3
Electives (Optional)	0-3
<b>Total</b>	<b>13-16</b>

**Spring Quarter**

PSYCD 1750 Psychopharmacology	3
PSYCD 1777 Integrated Healthcare	3
Electives (Optional)	0-3
<b>Total</b>	<b>13-16</b>

**Fourth Professional Year:**

**Total Quarter Credit Hours Fourth Year: 31.5 - 49.5**

**Clinical Block: Fall, Winter and Spring Quarters.  
(Summer Optional). Block hours billed across terms.**

PSYCD 1873 Advanced Therapy Practicum	Credits: 15
PSYCD 1874 Advanced Therapy Practicum Seminar	Credits: 4.5
PSYCD 1800 Advanced Therapy Practicum (Optional Summer Extension)	Credits: 5
PSYCD 1801 Advanced Therapy Practicum Seminar (Optional Summer Extension)	Credits: 1

**Total 19.5-25.5**

**Summer Quarter**

PSYCD 1811 Dissertation I	2
PSYCD 1822 Professional Development and Lifelong Learning I	1
Electives (Optional)	0-3

**Total 3-12**

**Fall Quarter**

PSYCD 1812 Dissertation II	2
PSYCD 1823 Professional Development and Lifelong Learning II	1
Electives (Optional)	0-3

**Total 9.5-12.5**

**Winter Quarter**

PSYCD 1813 Dissertation III	2
PSYCD 1824 Professional Development and Lifelong Learning III	1
Electives (Optional)	0-3

**Total 9.5-12.5**

**Spring Quarter**

PSYCD 1814 Dissertation IV	2
PSYCD 1825 Professional Development and Lifelong Learning IV	1

	Electives (Optional)	0-3	
<b>Total</b>		<b>9.5-12.5</b>	
<b>Fifth Professional Year:</b>			
Total Credits Hours Fifth Year:	Clinical	50-52	
Block: Summer, Fall, Winter, Spring Quarters Block	PSYCD 1905	50	
hours billed across terms.	Internship		
<b>Summer Quarter</b>			
PSYCD 1921	Dissertation Continuation I (Optional)	0.5	
<b>Total</b>		<b>0.5</b>	
<b>Fall Quarter</b>			
PSYCD 1922	Dissertation Continuation II (Optional)	0.5	
<b>Total</b>		<b>0.5</b>	
<b>Winter Quarter</b>			
PSYCD 1923	Dissertation Continuation III (Optional)	0.5	
<b>Total</b>		<b>0.5</b>	
<b>Spring Quarter</b>			
PSYCD 1924	Dissertation Continuation IV (Optional)	0.5	
<b>Total</b>		<b>0.5</b>	
<b>Electives</b>			
PSYCD 1339	Counseling Modalities & Chemical Dependency	3	
PSYCD 1345	Theories and Approaches to Marriage Counseling and Therapy	3	
PSYCD 1462	Trauma, Death and Dying	3	
PSYCD 1463	Introduction to Telehealth for Clinical Psychologists	3	
PSYCD 1465	Psychology of Rehabilitation	3	
PSYCD 1473	Child & Adolescent Assessment I	3	
PSYCD 1474	Child & Adolescent Assessment II	3	
PSYCD 1475	Child & Adolescent Psychotherapy I	3	

PSYCD 1476	Child & Adolescent Psychotherapy II	3
PSYCD 1478	Directed Readings in Clinical Psychology I	1-3
PSYCD 1479	Directed Readings in Clinical Psychology II	1-3
PSYCD 1480	Forensic Psychology	3
PSYCD 1488	Independent Study I	1-3
PSYCD 1489	Independent Study II	1-3
PSYCD 1494	Special Topics	1-3
PSCID 1379	LGBTQI Considerations in the Provision of Healthcare	1
CORED 1699H	Interprofessional Education II	1
PSYCD 1770	Human Sexuality	3
PSYCD 1464	Health Psychology	3

## COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. Click here to access the full course index with listed prerequisites.

### *CORED 1599H Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease. 1 credit

### *PSYCD 1501 Professional Issues and Ethics*

Legal, ethical, and professional issues are discussed in the context of the delivery of mental health services. This includes the American Psychological Association Ethical Standards and Code of Conduct (APA, 2017), current practice guidelines, state and federal mental health law and regulations relating to privacy and confidentiality in interdisciplinary contexts, ethical standards in research, and issues related to competency, licensure and lifelong learning. 3 credits

### *PSYCD 1502 Life Span Development I*

Life Span Development I is the foundational course intended to provide a theoretical framework for working with children and adolescents. The course will build upon undergraduate courses highlighting human development. It will examine (in

depth) the major human developmental issues from birth through adolescence related to the physical, biological, cognitive, social, and emotional functioning for both normal and abnormal development. Topics will include theories of child development, prenatal considerations, early skill acquisition, family-related social/emotional/behavioral development, peer-related social/emotional/behavioral development, influences of maltreatment, gender development, and personality development. Assessment, interventions, and prevention models related to abnormal development will also be addressed, and the course will provide an overview of more severe pathology that originates in childhood.

3 credits

#### *PSYCD 1503 Life Span Development II*

This course examines the biopsychosocial factors in adult development and aging. Topics include physical, psychological, and social changes that occur from early adulthood through senescence, and normal and abnormal changes through this cycle including cognitive changes. The course examines the role of work, career, and retirement as it impacts on basic adult life processes. The prospect of death and dying is also covered. Individual diversity factors and interdisciplinary collaboration are emphasized.

3 credits

#### *PSYCD 1504 Research Methods and Design*

This course is a survey of the methods used in empirical and clinical research, program evaluation, and intervention outcome studies. Students will learn both experimental and quasi-experimental designs. Strategies for research design, subject selection, and statistical analysis will also be examined. Special emphasis is placed on students developing their own original research protocols and the practical considerations involved.

3 credits

#### *PSYCD 1505, 1506 Professional Development Seminar I, II*

Each seminar reviews the professional development of entry level students. Students meet with faculty to discuss issues related to their professional development in their pursuit education and training to become clinical psychologists. Each seminar is evaluated on a pass/fail basis.

Each course 1 credit

#### *PSYCD 1507 History and Systems*

This course is a survey of the historical development of both experimental and clinical psychology. Major systems of psychology include sensory-perceptual psychology (Gestalt), Freudian, psychodynamic, behavioral, cognitive, social, family, humanistic, and existential. Major theorists such as Freud, Adler, Jung, Maslow, Skinner, Piaget, Beck, and

Meichenbaum are examined.

3 credits

#### *PSYCD 1508 Research Methods II*

Building on the skills and techniques acquired in PSYCD 1504 (Research Methods and Design), this course explores research in various applied settings, and further explores the direct relationship between research and clinical practice. Special emphasis is placed on students developing their own original research protocols and the practical considerations involved.

3 credits

#### *PSYCD 1510 Statistics I*

The course examines basic statistical measures including parametric and nonparametric tests at both the theoretical and applied levels. The course will allow the student to understand the statistical methods used in clinical research. Emphasis is placed on the preparation of the students for their own clinical dissertation research.

3 credits

#### *PSYCD 1515 Tests and Measurements*

This course focuses on scientific bases for psychological testing. The course examines the philosophical, historical, and theoretical foundations of psychological testing, assessment and measurement. The course also addresses the methodological and statistical basis for psychological assessment, including test construction, validity, reliability, and other applications important for test interpretation.

3 credits

#### *PSYCD 1520 Clinical Appraisal and Interviewing*

This course provides the clinical psychology trainee with a comprehensive approach to learning the techniques of clinical interviewing and diagnostic assessment. The student will learn what questions to ask and how to structure and guide the clinical interview. Development of clinical interviewing skills is both didactic and experiential with the student conducting mock interviews of patients. Students are introduced to diagnostic assessment, active listening, psychological inference and basic report writing.

3 credits

#### *PSYCD 1524 Intelligence Testing I*

This course introduces the student to the theory, administration, scoring, and interpretation of standard intelligence tests. Intellectual assessment scales examined include the Stanford-Binet, and the various Wechsler Scales. Basic interpretation and report writing skills are developed. Biopsychosocial, cultural, ethnic, and disability factors affecting test validity and interpretation are also examined.

3 credits

*PSYCD 1525 Intelligence Testing II*

The purpose of this course is to emphasize the use of clinical instruments to assess cognitive functioning of children and adults. The course is designed to develop competency in administration, scoring, and report writing. It consists of lectures, demonstrations, practice administrations, and individual checkouts of competencies in test administration. The students receive constructive feedback in areas related to test administration, scoring, interpretation of results and report writing.

3 credits

*PSYCD 1526 Personality Assessment I: Objective Techniques*

This course introduces the student to the administration, interpretation, and scoring of the objective tests for personality assessment. Tests examined include the MMPI2, and Millon Scales. Basic interpretation and report writing skills are taught for the objective personality assessment instruments. Biopsychosocial, cultural, ethnic, gender, and disability factors affecting assessment validity and interpretation are also examined.

3 credits

*PSYCD 1527 Personality Assessment II: Projective Techniques*

This course provides the clinical psychology student with instruction and practice in the administration, scoring, and interpretation of the projective techniques including the Rorschach, Thematic Apperception Test, Children's Apperception Test, and projective drawings. The course addresses relevant cultural, ethnic, gender, and disability factors in considering interpretation of results and in the development of integrative report writing.

2 credits

*PSYCD 1550 Biological Bases of Behavior*

This course provides an overview of the biological processes underlying human behavior. This encompasses fundamental nervous system structures and processes, including evolutionary theory, genetics, neuroanatomy, synaptic transmission, sensory processing, neurodevelopment, and neuroplasticity.

3 credits

*PSYCD 1582, 1583 Clerkship I, II*

The clerkship sequence is a supervised pre-practicum field experience for students, focusing on the development of clinical and clinical research skills. A clerkship may take place in a number of settings under the direct supervision of program faculty. Students work at training sites in a variety of clinical and research roles. A student must complete a minimum of 2 credits of clerkship.

Each course 1 credit

*PSYCD 1600 Diagnostic Practicum (Optional Summer Extension)*

The diagnostic practicum is designed to provide the practical experiences in psychodiagnostics that are appropriate for the training of practitioners in clinical psychology. Students may be registered for Summer block based on practicum start and end dates.

5 credits

Prerequisites: Approval of Director of Training, and Program Director; Concurrent enrollment in PSYCD 1601 Diagnostic Practicum Seminar.

*PSYCD 1601 Diagnostic Practicum Seminar (Optional Summer Extension)*

Students come together from various diagnostic practicum sites for the purpose of supervision and discussion of the clinical experience. Students are supervised in order to maximize the learning experience in the clinical setting.

1 credit

Prerequisites: Approval of Director of Training, and Program Director; Concurrent enrollment in PSYCD 1600 Diagnostic Practicum.

*PSYCD 1610 Diversity in Clinical Psychology*

Using a biopsychosocial model, this course examines the impact of culture, race, ethnicity, sexual orientation and gender identity, socioeconomic status, and religion on theory and practice in clinical psychology. The course looks at the interaction between the clinician's own perceptions of culture and that of the patient. The impact of ethnicity, economics, disability, gender, and race is also discussed as it affects the delivery of psychological and psychiatric services. The societal impact due to differential access to services is also examined along with possible solutions to this problem.

3 credits

*PSYCD 1611 Statistics II*

This course is designed to promote learning of additional statistical methods used to analyze and interpret quantitative data, focusing on the implementation of statistical methods for experimentation, research, and data-driven decision-making. Appropriate statistical software packages will be reviewed.

3 credits

*PSYCD 1620 Advanced Assessment*

This course concentrates on the development of knowledge, skills and attitudes needed in the interpretation and reporting of test findings. Emphasis is placed on a synergistic understanding of the contributions of various test findings to the formulation of a valid diagnostic impression and recommendations. Examination of differential diagnoses, formulating a case conceptualization and recommendations, clinical report writing and feedback are reviewed with

consideration of diversity issues.  
3 credits

*PSYCD 1631 Cognitive Behavioral Theories and Approaches to Psychotherapy*

Starting with the pioneering work of Beck and Ellis and progressing to the current theory and practice, this course examines the major paradigm shift in clinical psychology with the so-called "Cognitive Revolution." The course reviews the impact of cognitive therapy on the development of empirically verified treatment approaches. It also reviews the current research supporting the use of a cognitive psychotherapy approach with certain diagnostic conditions and diverse populations.

3 credits

Prerequisites: PSYCD 1740 History and Systems; PSYCD 1636 Behavior Therapy; PSYCD 1660 Cognitive-Affective Bases of Behavior

*PSYCD 1632 Psychodynamic Approaches to Psychotherapy*

Beginning with the seminal work of Freud, this course examines the development of the rich and diverse psychodynamic approaches to theory and technique. The drive, ego, object relations and self-psychological models are reviewed and contrasted. Application of psychodynamic theory in treatment is also discussed. Case studies are used to exemplify the various techniques used in the psychodynamic approach.

3 credits

Prerequisites: PSYCD 1520 Clinical Appraisal and Interviewing; PSYCD 1740 History and Systems;

*PSYCD 1636 Behavior Therapy*

This advanced course will examine the application of learning theory to behavior therapy and CBT as applied to a variety of psychopathologies, behavior disorders, and other mental health conditions in adults. Behavioral and cognitive-behavioral therapy techniques shown to be most effective in the treatment/remediation of symptoms and psychopathological conditions will be introduced. Also examined will be how behavior therapy is applied to various, sometimes underserved populations such as individuals with chronic mental illness and individuals with different ethnic, racial, or cultural backgrounds.

3 credits

Prerequisites: PSYCD 1740 History and Systems

*PSYCD 1640 Introduction to Neuropsychology*

This course reviews the major systems and structures of the brain and central nervous system. In addition to examining normal neurological functioning, the course discusses common impairments in cognition, language, and perception with neurological bases. Topics covered include neurological syndromes such as cerebral vascular accidents (CVAs), head

trauma and concomitant brain injury, seizure disorders, and various forms of dementia. Case studies and neuropsychological test data highlight each syndrome.

3 credits

Prerequisites: PSYCD 1515 Tests and Measurements; PSYCD 1550 Biological Bases of Behavior

*PSYCD 1654 Social and Cultural Bases of Behavior*

This course examines the influence of socioeconomic, diversity, and cultural influences on behavior. Normative behavior is examined in the biopsychosocial context. Also covered is the consideration of individual behavior in new, diverse, or unfamiliar sociocultural contexts.

3 credits

*PSYCD 1660 Cognitive-Affective Bases of Behavior*

This is a discussion of topics related to the cognitive and affective bases of behavior. Specific cognitive processes such as learning, perception, memory, mental representations, and embodiment are reviewed. In addition, the roles of motivation and emotion in behavior are discussed. Special emphasis will be placed on examining the biological underpinnings of cognitive and how neuroimaging is used to prove cognition function in different populations.

3 credits

*PSYCD 1669 Psychopathology I: Anxiety and Personality Disorders*

The course provides students with theory and research underlying anxiety and personality disorders. Topics include introduction to categorical vs. dimensional classification of dual diagnoses, anxiety disorders, obsessive-compulsive and related disorders, trauma and stressor-related disorders, somatic symptom and related disorders, dissociative disorders, and personality disorders. Biopsychosocial aspects of disorders are reviewed. Diagnostic differentiation and empirically supported assessment and treatment approaches are presented. Inter-individual diversity and interdisciplinary aspects of care related to diagnostics are highlighted.

3 credits

*PSYCD 1670 Psychopathology II: Depressive, Bipolar and Schizophrenia Spectrum Disorders*

This course will provide students with an introduction to underlying depressive disorders, bipolar and related disorders, and schizophrenia spectrum and other psychotic disorders. Other topics covered include suicide, neurocognitive disorders, feeding and eating disorders, sexual dysfunctions, gender dysphoria, and paraphilic disorders. Clinical presentations, diagnostic differentiation, biopsychosocial understanding, and empirically supported assessment and therapy are presented and discussed. Case studies are used to present variations in symptom presentation. The roles of culture, gender, ethnic, age, and disability factors are also

discussed as are interdisciplinary aspects of care related to diagnostics.

3 credits

#### *PSYCD 1671 Child Psychopathology*

This course provides a broad overview of child and adolescent psychopathology, including a focus on understanding basic concepts (e.g., DSM-V diagnostic criteria), issues related to classification and assessment, the historical context of disorders, developmental influences (including maltreatment), theoretical perspectives, existing research. An introduction to assessment, diagnosis, case conceptualization, and developing treatment interventions will also be covered.

3 credits

#### *PSYCD 1673 Diagnostic Practicum*

This course sequence is designed to provide the practical experiences in psychodiagnostics that are appropriate for the training of practitioners in clinical psychology. Students complete a diagnostic practicum at an approved training site. Students must complete a minimum of 15 quarter hours in the block.

Total 15 credits

Prerequisites: Approval of Director of Training, Academic Review Committee, and Program Director; Concurrent enrollment in PSYCD 1674 Diagnostic Practicum Seminar. For more information refer to the current Clinical Psychology Clinical Training Manual.

#### *PSYCD 1674 Diagnostic Practicum Seminar*

Students come together from various diagnostic practicum sites for the purpose of supervision and discussion of the clinical experience. Students are supervised in order to maximize the learning experience in the clinical setting.

Total 6 credits

Prerequisites: Approval of Director of Training, Academic Review Committee, and Program Director; Concurrent enrollment in PSYCD 1673 Diagnostic Practicum. For more information refer to the current Clinical Psychology Clinical Training Manual.

#### *PSYCD 1680 Research Seminar: Integration of Science and Practice*

This course provides an extensive review of the research process through examination of published empirical and clinical research articles. Students are expected to become good consumers of the research literature in order to develop sound research habits and identify the empirical support for evidence based practice.

2 credits

#### *PSYCD 1700 Therapy Practicum (Optional Summer Extension)*

The practicum is designed to provide the practical experiences in psychotherapy that are appropriate for the training of practitioners in clinical psychology. Students may be registered for Summer block based on practicum start and end dates.

5 credits

Prerequisites: Approval of Director of Training and Program Director; Concurrent enrollment in PSYCD 1701 Therapy Practicum Seminar.

#### *PSYCD 1701 Therapy Practicum Seminar (Optional Summer Extension)*

Students come together from various practicum sites for the purpose of supervision and discussion of the clinical experience. Students are supervised in order to maximize the learning experience in the clinical setting.

1 credit

Prerequisites: Approval of Director of Training, and Program Director; Concurrent enrollment in PSYCD 1700 Therapy Practicum.

#### *PSYCD 1705 Family and Systems Theory and Application*

The family as a system will be reviewed by examining external and internal boundaries, internal hierarchy, self-regulation through feedback, and lifecycle changes. Theory and research will be discussed within the context of relevant cultural, age, gender, and ethnic factors.

3 credits

Prerequisites: PSYCD 1502 Life Span Development I; PSYCD 1503 Life Span Development II; PSYCD 1740 History and Systems

#### *PSYCD 1708 Advanced Ethics*

This course will focus on ethical decision making and the practical application of ethical principles to examine ethical and legal dilemmas utilizing a case-based format.

3 credits

#### *PSYCD 1732 Supervision*

This course examines the aspects of clinical supervision, the supervisory processes and the pertinent theories and practice models for supervision in a variety of employment settings. The course will highlight the skills and qualities of the supervisor and supervisee while focusing on ways to promote effective supervision.

2 credits

*PSYCD 1733 Consultation Models and Practice*

This course reviews the pertinent theories and practice models for consultation in a variety of employment settings. This course is focused on the knowledge of consultation models and application of consultation skills.

2 credits

Prerequisites: PSYCD 1504 Research Methods and Design; PSYCD 1508 Research Methods II; PSYCD 1510 Statistics I; PSYCD 1611 Statistics II; Approval of Program Director

*PSYCD 1750 Psychopharmacology*

This course examines the development and use of pharmacological agents in the treatment of psychopathology. Further, the course examines the use of medication with empirically verified therapy approaches. All classes of psychopharmacological agents are reviewed including neuroleptics, anxiolytics, mood stabilizers, and antidepressants.

3 credits

*PSYCD 1766 Advanced Integration of Scientific Knowledge*

This course reviews, expands, and integrates the basic knowledge base of scientific psychology first established in previous foundational, discipline specific knowledge courses on the affective, biological, cognitive, developmental, and social bases of behavior. Knowledge from these discipline specific courses is integrated and then applied to a variety of clinical issues, demonstrating comprehensive, scientific understanding of core knowledge of behavior and of psychology as a broader, inclusive discipline.

3 credits

*PSYCD 1772 Advanced Psychotherapy*

The course will provide students with an in-depth and advanced overview of the theory and research underlying various forms of psychopathology. Concurrently, various psychotherapeutic approaches to the treatment of these disorders will be investigated, including cognitive-behavioral, psychoanalytic, psychodynamic, group, family and humanistic approaches. The course focuses on the clinical manifestations of psychopathology in adults and the effective use of psychotherapy as identified in the empirical clinical research.

3 credits

*PSYCD 1773 Therapy Practicum*

The therapy practicum sequence involves direct clinical experiences at an approved training location. Students are enrolled while completing the required therapy practicum. Students must complete a total of 15 credits in the block.

Total 15 credits

Prerequisites: PSYCD 1682, 1684, 1686 Diagnostic Practicum I, II, III; Concurrent enrollment in PSYCD 1774 Therapy Practicum Seminar. Approval of Director of

Training, Academic Review Committee, and Program Director. For more information refer to the current Clinical Psychology Clinical Training Manual.

*PSYCD 1774 Therapy Practicum Seminar*

This seminar sequence reviews the progress of students enrolled in a therapy practicum at an approved training location. Students are required to meet on campus to review training experiences and present clinical cases to the attendees.

Total 6 credits

Prerequisites: PSYCD 1683, 1685, 1687 Diagnostic Practicum Seminar I, II, III; Concurrent enrollment in PSYCD 1773 Therapy Practicum; Approval of Director of Training, Academic Review Committee, and Program Director. For more information refer to the current Clinical Psychology Clinical Training Manual.

*PSYCD 1777 Integrated Healthcare*

This course will focus on the practice of integrated behavioral healthcare in medical settings. Students will learn about the roles and responsibilities of psychologists as behavioral healthcare providers in primary care medicine. Much of the focus of the course will be on learning about models of integrated care and ways in which these models are applicable to clinical work with patients. Students will also learn about roles that psychologists play in the collaborative assessment and treatment of chronic medical conditions.

3 credits

*PSYCD 1800 Advanced Therapy Practicum (Optional Summer Extension)*

The practicum is designed to provide the practical experiences in advanced psychological assessment and intervention that are appropriate for the training of practitioners in clinical psychology. Students may be registered for Summer block based on practicum start and end dates.

5 credits

Prerequisites: Approval of Director of Training and Program Director; Concurrent enrollment in PSYCD 1801 Advanced Therapy Practicum Seminar.

*PSYCD 1801 Advanced Therapy Practicum Seminar (Optional Summer Extension)*

Students come together from various practicum sites for the purpose of supervision and discussion of the clinical experience. Students are supervised in order to maximize the learning experience in the clinical setting.

1 credit

Prerequisites: Approval of Director of Training, and Program Director; Concurrent enrollment in PSYCD 1800 Advanced Therapy Practicum.



*PSYCD 1811, 1812, 1813, 1814 Dissertation I, II, III, IV*  
This course is designed to facilitate completion of the Dissertation during the fourth year of the program. Once enrolled, the student must be enrolled in this sequence for 4 consecutive quarters. A student must complete a maximum total of 8 credits.  
Each course 2 credits

*PSYCD 1822, 1823, 1824, 1825 Professional Development and Lifelong Learning I, II, III, and IV*  
Professional Development and Lifelong Learning is a sequence of courses addressing the factors and processes that advance students' professional development and promote an emphasis on lifelong learning. This includes preparation for entry level practice, the business aspects of practice, preparation for licensure, and maintenance of competency. This four-part sequence must be taken in numerical order.  
Total 4 credits

*PSYCD 1873 Advanced Therapy Practicum*  
The advanced practicum involves direct clinical experiences at an approved training location. Students are enrolled while completing the required advanced practicum. Students must complete a total of 15 credits in the block.  
Total 15 credits  
Prerequisites: PSYCD 1782, 1784, 1786 Therapy Practicum I, II, and II; Concurrent enrollment in PSYCD 1874 Advanced Therapy Practicum Seminar; Approval of Director of Training, Academic Review Committee, and Program Director. For more information refer to the current Clinical Psychology Clinical Training Manual.

*PSYCD 1874 Advanced Therapy Practicum Seminar*  
This seminar reviews the progress of students enrolled in an advanced practicum at an approved training location. Students are required to meet on campus to review training experiences and present clinical cases to the attendees.  
Total 4.5 credits  
Prerequisites: PSYCD 1783, 1785, 1787 Therapy Practicum Seminar I, II, or III; Concurrent enrollment in PSYCD 1873 Advanced Therapy Practicum; Approval of Director of Training, Academic Review Committee, and Program Director. For more information refer to the current Clinical Psychology Clinical Training Manual.

*PSYCD 1905 Internship*  
The internship is a 12-month full-time commitment (2,000 hours) that is designed to provide an intensive clinical experience expanding upon the required didactic coursework, clerkship, diagnostic practicum, therapy practicum, and advanced practicum experiences. In some approved circumstances, students may complete the requirement in 24 months. (This replaces PSYCD 1900, 1901, 1902, and 1903 Internship.) Enrollment is required for four consecutive

quarters, 50 credits total. Enrollment may begin in Summer or Fall quarter.  
50 credits

*PSYCD 1921, 1922, 1923, 1924 Dissertation Continuation I, II, III, IV (Optional)*  
This course sequence is reserved for students on internship needing additional time for completion of the required Dissertation.  
Each course 0.5 credits

*PSYCD 1990-1999 Dissertation Post-Internship I-X*  
This course is reserved for students needing additional time after internship for completion of the required Dissertation. A fee will be assessed for students who are registered for this course beyond year 5 of the program.  
Each course 0.5 credits

## ELECTIVES

The Program offers a number elective courses which are offered periodically to provide enhanced education in particular areas of student interest.

### Child and Adolescent Emphasis

Students may elect to pursue a specialized emphasis in clinical work with children and adolescents. This emphasis includes additional elective coursework in assessment and therapy with children, adolescents and families, as well as focused training and research experiences as outlined below. Required courses include:

- PSYCD 1671 Child Psychopathology
- PSYCD 1473 Child & Adolescent Assessment I (Elective)
- PSYCD 1474 Child & Adolescent Assessment II (Elective)
- PSYCD 1475 Child & Adolescent Psychotherapy I (Elective)
- PSYCD 1476 Child & Adolescent Psychotherapy II (Elective)
- PSYCD 1705 Family and Systems Theory and Application (Elective)

In order to enroll in electives within the Child and Adolescent emphasis, students must have successfully completed all required 1st and 2nd year courses. Students entering the program with advanced standing may seek permission from the emphasis director or program director.

In addition to the required courses, students who elect this emphasis are expected to meet the following requirements:

- At least two clinical training experiences focused on children & adolescents, one diagnostic, one therapy

- Dissertation topic required to have a child, adolescent, or family focus
- Mentorship-Group meetings with the Coordinator of Child & Adolescent Emphasis as scheduled
- At least one submission of a presentation or scholarly work that has a child or adolescent emphasis (poster, presenter) at local, state, or national conference; must be primary presenter or author.

*PSYCD 1339 Counseling Modalities & Chemical Dependency*

This course details the various models used in the treatment of alcohol and chemical abuse/dependency. Topics include psychopharmacologic interventions, group therapy, detoxification, Alcoholics Anonymous, cognitive therapy, and other empirically supported treatment approaches. A minimum enrollment of 5 students is required for this course to be offered.

3 credits

*PSYCD 1345 Theories and Approaches to Marriage Counseling and Therapy*

This course examines the basic theories and assumptions underlying marriage therapy while considering the biopsychosocial perspective. Using case studies, films, and videotapes the course examines fundamental techniques of both therapy and diagnostic evaluation such as the use and development of the genogram. A minimum enrollment of 5 students is required for this course to be offered.

3 credits

*PSYCD 1462 Trauma, Death and Dying*

This course will explore the cross-cultural aspects of death and dying in the context of trauma and bereavement. Students will explore the various definitions of trauma from a cognitive, affective and behavioral perspective. Treatment approaches to grief, bereavement and complicated grief will be discussed. Students will be encouraged to explore their pre-existing beliefs regarding grieving and loss, and will be asked to explore more functional ways of dealing with issues of bereavement.

3 credits

*PSYCD 1463 Introduction to Telehealth for Clinical Psychologists*

This course provides a framework for the integration of technology with the practice of clinical psychology. The course will highlight important factors related to the use of telehealth interventions in practice. Topics include the historical context for the use of technology with healthcare services, the need for novel means of reaching individuals in need of care, ethical and legal considerations, HIPAA compliance, considerations for synchronous modalities,

practice considerations for asynchronous modalities, mHealth, and supervision and consultation models.  
3 credits

*PSYCD 1465 Psychology of Rehabilitation*

This course examines the neuropsychiatric and neurobehavioral disorders in the practice of clinical neuropsychology and behavioral medicine. Various disorders are reviewed from neuroanatomical, medical, neuropsychological, rehabilitation, and practical clinical viewpoints. The spectrum of disorders, includes such conditions as traumatic brain injury, right hemisphere syndromes, dementia, aphasia, seizure disorders, arteriovenous malformations, and neurotoxic disorders. A minimum enrollment of 5 students is required for this course to be offered.

3 credits

*PSYCD 1473 Child & Adolescent Assessment I*

This course will explore the different assessments use when working with children and adolescents presenting with mild to moderate emotional/behavioral/developmental concerns (e.g., anxiety, mood disorders, ADHD, disruptive behavior). In addition to overviews of different assessment tools, the role or diagnostic interviewing with both caregivers and children will be reviewed.

3 credits

Prerequisites: In order to enroll in electives within the Child and Adolescent emphasis, students must have successfully completed all required 1st and 2nd year courses. Students entering the program with advanced standing may seek permission from the emphasis director or program director.

*PSYCD 1474 Child & Adolescent Assessment II*

This course will explore the different emotional and behavioral assessment used when working with children and adolescents presenting with emotional and behavioral problems. A brief overview of child and adolescent psychopathology will be covered, as well as different assessment tools utilized to assess for several pathologies in children, including Bipolar Disorders, Autism Spectrum Disorders, and Childhood Schizophrenia.

3 credits

Prerequisites: PSYCD 1473 Child and Adolescent Assessment I; In order to enroll in electives within the Child and Adolescent emphasis, students must have successfully completed all required 1st and 2nd year courses. Students entering the program with advanced standing may seek permission from the emphasis director or program director.

*PSYCD 1475 Child & Adolescent Psychotherapy I*

This course will explore evidence-based psychosocial treatment strategies and interventions to address emotional/behavioral difficulties common to youth, as

delineated in DSM-5. Focus will be given to the treatment of, but not necessarily limited to, Disruptive, Impulse-Control, and Conduct Disorders, ADHD, Anxiety Disorders, Obsessive-Compulsive and Related Disorders, and Depressive/Mood Disorders. Theories and research will be integrated with modeling and in-class practice of techniques, as appropriate.

3 credits

Prerequisites: In order to enroll in electives within the Child and Adolescent emphasis, students must have successfully completed all required 1st and 2nd year courses. Students entering the program with advanced standing may seek permission from the emphasis director or program director.

*PSYCD 1476 Child & Adolescent Psychotherapy II*

This course will explore evidence-based psychosocial treatment strategies and interventions to address emotional/behavioral difficulties throughout youth, as delineated in the DSM-5. Focus will be given to the treatment of, but not necessarily limited to, Somatic Disorders, Elimination Disorders, Sleep Disorders, Feeding/Eating Disorders, and Trauma. Theories and research will be integrated with modeling and in-class practice of techniques, as appropriate.

3 credits

Prerequisites: PSYCD 1475 Child and Adolescent Psychotherapy I; In order to enroll in electives within the Child and Adolescent emphasis, students must have successfully completed all required 1st and 2nd year courses. Students entering the program with advanced standing may seek permission from the emphasis director or program director.

*PSYCD 1478, 1479 Directed Readings in Clinical Psychology I, II*

This course permits focused exploration of an approved topic in clinical or professional psychology. With the consultation of a program faculty member, a reading list is developed around a relevant topic. The readings focus on the interchange between theory, research, professional practice and diversity issues. A comprehensive plan for evaluation of performance is developed in consultation with program faculty and the approval of the Program Director.

1-3 credits

*PSYCD 1480 Forensic Psychology*

The science and practice of clinical psychology will be applied to the assessment and treatment of offender populations. Examples will include cultural, social and economic issues in working with forensic populations in inpatient, legal and institutional settings. A minimum enrollment of 5 students is required for this course to be offered.

3 credits

Prerequisites: PSYCD 1501 Professional Issues and Ethics

*PSYCD 1488, 1489 Independent Study I, II*

This course permits the student to pursue individualized study in foundational psychology, empirical research, clinical psychology or a related topic under the direct supervision of a faculty member. A comprehensive study plan with methods for evaluation of performance is developed in consultation with program faculty and the approval of the Program Director.

1-3 credits

*PSYCD 1494 Special Topics*

This course permits examination of an approved specialized topic in clinical or professional psychology. Courses focus on the interchange between theory, research, professional practice and diversity issues in that topic area. This course can include a variety of topic areas not addressed in other courses including Crisis Intervention, Autism Spectrum, Geriatric Psychology, etc.

1-3 credits

*PSCID 1379 LGBTQI Considerations in the Provision of Healthcare*

This course helps students better provide compassionate and thorough patient centered care to members of the Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex (LGBTQI) community. Lecture topics include an introduction to LGBTQI culture and history, health and social service needs, and communication strategies. Students learn how knowledge deficits in these areas can lead to health inequities for these populations.

1 credit

*CORED 1699H Interprofessional Education II*

This course will provide students, working in interprofessional teams, opportunities to learn and provide integrated, patient-centered care in the development of therapeutic care plans using a team-based approach. Active learning techniques, interprofessional learning, and clinical simulation will be used to enhance the education of learners to effectively engage in problem solving and communication activities that address current health related issues in the care of humans, animals, and the environment.

1 credit

*PSYCD 1770 Human Sexuality*

This course explores human sexuality as a central and multidimensional part of the human experience. Current theoretical approaches, research and empirically based interventions will be reviewed. Topics will include sexual behaviors, body image, vulnerability, sensuality, seduction, sexual function and dysfunction. The course will examine the

role sexuality plays in psychotherapeutic relationships. Individual differences and cultural diversity will be addressed taking into account, age, ethnicity, gender, cultural, religious and social influences.

3 credits

Prerequisites: PSYCD 1550 Biological Bases of Behavior

### *PSYCD 1464 Health Psychology*

This course introduces Health Psychology concepts and empirically supported interventions as they apply to multidisciplinary assessments and treatment of medical populations. The course focuses on applying this information to health promotion, prevention, and treatment.

3 credits

Prerequisites: PSYCD 1550 Biological Bases of Behavior

## ACADEMIC AND ADMINISTRATIVE POLICIES

### **Satisfactory Progress**

Once students have matriculated, they must be enrolled in the program for fall, winter, spring and summer quarter until graduation. Credit hours can be earned during any academic quarter: fall, winter, spring, or summer. At the conclusion of each quarter, the Student Academic Review Committee assesses student progress based on academics, clinical performance, scholarly activity, professionalism, demonstration of satisfactory completion of all required program competencies, and faculty evaluations. Students must demonstrate satisfactory achievement levels in all of the program's education and training competency areas throughout their time in the program. Problems within any evaluative domain can lead to referral to the Program's Student Academic Review Committee (ARC) and may lead to a recommendation for dismissal from the program. The ARC addresses all academic problems according to the CHS academic policies published in the University Catalog and the MWU Student Handbook, as well as policies and procedures published in the Clinical Psychology Program Student Handbook, the Clinical Psychology Program Training Manual and the Clinical Psychology Dissertation Manual. Students are provided oral and written feedback about their progress periodically throughout the year through their faculty mentor, as well as through the Student Academic Review Committee as needed.

### **Academic Standards**

A student enrolled in the Clinical Psychology Program must pass all Psy.D. courses with a minimum grade of B- or P and maintain a cumulative grade point average (GPA) of 3.00 or higher to achieve satisfactory academic progress. A course grade of <B- is considered a course failure and will appear on the student's transcript as an F.

If a student fails a course, the student may be required by the Program's Student Academic Review Committee to retake that course. Students will not be required to retake an elective course, but may be permitted to do so. Students will only be able to retake a failed course once. To successfully retake the course, the student needs to achieve a grade of B- or better in a graded course or a P in a Pass/Fail course. If a student fails the retaken course it will be considered as another failure by the Student Academic Review Committee and will be addressed accordingly in conjunction with the College of Health Sciences (CHS) academic policies.

Students who fail a course with a course average below 80% (B-) at the end of the quarter, may be eligible for re-examination of their lowest exam/project grade in the form of a cumulative exam or equivalent assessment. The course director will specify in the course syllabus which exams or grades are eligible for replacement and what type of re-examination will be utilized. A student will only be eligible for reexamination if the replacement of the lowest grade (project or examination) by a grade of 80% will allow the student to pass the course. The maximum grade to be awarded upon reexamination is 80% and maximum grade for the course is 80% (B-). Faculty members are available to answer specific questions but no formal review sessions will be conducted. Preparation for reexamination is largely an independent study endeavor. Students may only take one reexamination in a single course. The maximum number of reexaminations in the Clinical Psychology Program is two (2). Reexaminations will be scheduled by the course director, and all reexaminations must be completed prior to the start of the next quarter unless otherwise approved by the Program Director. Any student failing to take the reexamination on the scheduled date will receive a grade of zero (0) for the reexamination and fail the course. If reexamination results in failure, students will not have successfully completed all academic requirements in order to progress in the program. The student will be referred to the Academic Review Committee (ARC).

To progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter. Students who have not satisfactorily completed all academic requirements in order to progress in the program will be referred to the Student Academic Review Committee. The Student Academic Review Committee will review the student's academic record according to the College of Health Sciences academic policies and make a recommendation to the CHS Dean. Recommendations may include a leave of absence until the student can successfully complete the necessary Program requirements, or other academic consequences including dismissal.

### **Program-Based Competencies**

In addition to academic grades, competency checkpoints are assessed throughout the program related to the Program's required competency domains. Failure to demonstrate required satisfactory performance on a program competency that is part of a course will lead to a course failure (grade of F). All program competency exams must be passed with a minimum grade of B- on a graded exam or a P on a Pass/Fail exam. If a student does not perform satisfactorily on a program-based competency, one retest for that competency will be allowed. Retest of the competency must be completed within 10 calendar days from the first Monday following the end of the quarter or, in the case of the Qualifying Examination, the next time the examination is offered.

To satisfactorily pass a competency retest, students will need to obtain the equivalent of a minimum grade of B- on a graded exam or a grade of P on a Pass/Fail exam. In cases where demonstration of competency is part of a course, students who satisfactorily pass the competency retest may only receive the minimal passing course grade (B- in graded course, P in Pass/Fail course). Failing a competency retest indicates that the student is unable to demonstrate the required competency during the course and will result in a course grade of F. It will result in the student's referral to the Student Academic Review Committee. Failures in courses containing these program-based competencies will be addressed by the Student Academic Review Committee according to the College of Health Sciences academic policies.

### **Advancement to Doctoral Candidacy**

At the conclusion of the second year of study, advancement to doctoral candidacy will be determined by the faculty upon review of the student's progress in the following areas:

1. Academic progress
2. Clinical performance
3. Scholarly activity
4. Professionalism
5. Demonstration of satisfactory performance for required program competencies in the first two years of the program
6. Faculty evaluation
7. Qualifying Examination

Successful completion of the Qualifying Examination and satisfactory progress in areas one through six listed above signals the official acceptance of the matriculated student as a doctoral candidate.

Unsatisfactory progress in any of the above areas will lead to review by the Student Academic Review Committee and may result in dismissal from the program.

### **Qualifying Examination**

The purpose of the Qualifying Examination is to evaluate students' ability to integrate the core clinical and non-clinical course material from the first two years of study into comprehensive responses demonstrating organizational skills, analysis, synthesis, and differential thinking. The examination is given annually and is scheduled after the first two years of study, with *satisfactory completion of the academic requirements for degree of Master of Arts in Clinical Psychology* and the approval of the Student Academic Review Committee and the Program Director. The Qualifying Examination is a Program-based competency and evaluated on a Pass/Fail basis. Satisfactory completion of the Qualifying Examination is necessary in order to advance to Doctoral Candidacy and to complete the Clinical Psychology program.

Students failing the Qualifying Examination will be allowed one retake the next time the examination is offered. Students failing the Qualifying Examination will be given feedback and resources to help them prepare for retaking the examination. Satisfactory passage of all required competency gateways, including the Qualifying Examination, is required for satisfactory academic progress. Failure on the retake exam of the Qualifying Exam is considered grounds for dismissal from the Program.

## **FACULTY**

### **Nathaniel D. Krumdick, Ph.D.**

Loyola University of Chicago  
The Graduate School  
Associate Professor

### **Michelle M. Lee, Ph.D., ABPP**

Case Western Reserve University  
School of Graduate Studies  
College of Arts and Sciences  
Associate Program Director and Professor

### **Lorna London, Ph.D.**

University of South Carolina  
Assistant Director of Training and Assistant Professor

### **Misty M. Mann, Psy.D.**

The Illinois School of Professional Psychology  
Argosy University, Chicago  
Director of Training and Assistant Professor

### **Richard C. Ney, Ph.D., ABPP**

Loyola University of Chicago  
The Graduate School  
Professor

### **Jonathan G. Perle, Ph.D., ABPP**

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Assistant Professor

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American School of Professional Psychology at  
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Associate Professor

**Ann M. Sauer, Ph.D., ABPP**

Loyola University of Chicago  
The Graduate School  
Program Director and Associate Professor

**Lauren M. Sbarbaro, Psy.D.**

Midwestern University  
Assistant Professor

**Diana J. Semmelhack, Psy.D., ABPP**

Argosy University  
Illinois School of Professional Psychology  
Professor

# SPEECH-LANGUAGE PATHOLOGY PROGRAM

## MISSION

### **Speech-Language Pathology Program**

The Midwestern University Speech-Language Pathology Program is dedicated to the professional development of speech-language pathologists to work in a variety of healthcare and educational settings. As clinical scientists, they will serve the communication and swallowing needs of individuals across the lifespan through responsive, compassionate, ethical, and evidence-based practice.

### **Speech-Language Institute** - [www.mwuclinics.com/il/sp](http://www.mwuclinics.com/il/sp)

The Midwestern University Speech-Language Institute is dedicated to the dual missions of providing exceptional educational experiences for SLP students and outstanding service to the community. Faculty and student clinicians will evaluate and treat the communication and swallowing needs of children and adults who seek their services, upholding the highest standards of clinical practice. They shall commit themselves to the care of their clients and their families, continually striving for optimal communication and swallowing outcomes. They shall advocate for their clients' rights to effective communication and quality of life. They will exemplify the best standards of the healthcare and educational professions.

## VISION

We seek to transform outstanding students into clinical scientists who dedicate themselves to the highest standards of the profession of speech-language pathology. They will execute the full scope of clinical practice on behalf of individuals with communication and swallowing disorders.

## ACCREDITATION

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413. Speech-Language Pathology programs are accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA).

The Master of Science Program in Speech-Language Pathology (SLP) at Midwestern University (MWU) is accredited by the Council on Academic Accreditation in

Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, 800-498-2071 or 301-296-5700.

## DEGREE DESCRIPTION

The Speech-Language Pathology Program provides academic and clinical experiences that culminate in the Master of Science (M.S.) in Speech-Language Pathology degree. The curriculum is designed to prepare students for a professional role as a speech-language pathologist (SLP). Graduates of this program will be poised to assume positions as entry-level clinicians as part of a healthcare or educational team. The Speech-Language Pathology degree program is a continuous, full-time program of study that spans seven quarters, or 21 months from admission to graduation. The maximum allotted time for completion of the program is 31.5 months.

The Speech-Language Pathology Program offers a balanced curriculum to prepare future SLPs to work with both children and adults with communication disorders. Course elements are designed to imbue students with the knowledge base pertinent to the field, while simultaneously fostering the critical thinking, problem solving, and self-confidence that contributes to effective independent clinical practice. Further, students will develop empathy and compassion, which are hallmark traits of a master clinician.

The Speech-Language Pathology Program curriculum incorporates academic, research, and clinical experiences. The curriculum includes basic science and research coursework, in addition to courses that focus on specific communication disorders. Each student will explore the evidence base of speech-language pathology and related professions, and will apply knowledge gained to clinical practices. All students will learn about basic research methods within the discipline, and can elect to complete research that culminates in a master's thesis. Students will engage in clinical practica at the Midwestern University Clinic and at local schools and healthcare facilities. Each student will complete two advanced practica of at least 10 weeks duration. These involve full-time work in an educational facility, hospital or clinic. Students will gain clinical experiences with a wide variety of clients with communication impairment.

The Speech-Language Pathology Program is designed to prepare entry-level speech-language pathologists. Graduates will be able to demonstrate evidence of all knowledge and skill requirements to begin a Clinical Fellowship Year (CFY). At the completion of the CFY, graduates will be eligible to apply for the Certificate of Clinical Competence from the American Speech-Language-Hearing Association. Students will also be eligible to apply for state licensure through the Illinois Department of Financial and Professional Regulation (IDFPR), and a professional educator's license through the Illinois State Board of Education.

### **Program Objectives**

The Master of Science in Speech-Language Pathology Program seeks to:

1. Foster a humanistic learning environment for students;
2. Foster a holistic and compassionate approach to patient care;
3. Graduate competent speech-language pathologists who possess the levels of clinical judgment, understanding, empathy, technical skills, and independence to begin professional practice;
4. Instill a philosophy of lifelong learning in speech-language pathology students;
5. Promote research and scholarly activity among the faculty and students;
6. Develop a clinical practice in the Midwestern University Clinic that provides a broad range of evidence-based experiences for speech-language pathology students;
7. Contribute to the overall growth and academic excellence of Midwestern University by supporting its Mission and Vision.

## **ADMISSIONS**

The College of Health Sciences Speech-Language Pathology Program considers admission of those applicants who demonstrate academic and clinical aptitude coupled with professionalism. A competitive admissions framework is implemented to select program candidates. Each file is evaluated by a faculty committee using a specific program rubric.

The Midwestern University Speech-Language Pathology Program uses the Communication Sciences and Disorders Centralized Application Service (CSDCAS) for students applying to the program. Applicants should submit all materials by February 1, 2021 in order to be considered (<http://www.capsd.org/csdcas>). Please refer to the CSDCAS website for instructions on submission of application materials.

The Speech-Language Pathology Program operates on a rolling admissions cycle. Completed applications are reviewed throughout the cycle to determine applicant eligibility for

interviews. Interviews are typically conducted during the winter and spring quarters. Admissions decisions are generally made within one month of the interview. The Program does not accept students who transfer from another Speech-Language Pathology Program.

### **Admission Requirements**

Individuals applying for admission to the College of Health Sciences Speech-Language Pathology Program must submit documentation of the following minimum requirements before the academic year commences for the incoming class:

1. Completion of a baccalaureate degree from a regionally-accredited institution in Communication Sciences and Disorders, inclusive of the courses listed below, or
2. Completion of a baccalaureate degree from a regionally-accredited institution in an area other than Communication Sciences and Disorders with completion of a specified sequence of prerequisite coursework including all of the following:
  - Anatomy and Physiology of Communication Mechanisms
  - Phonetics
  - Speech and Language Development
  - Speech and Hearing Science
  - Statistics
  - One course each in biological sciences, physical sciences, and social sciences
3. Minimum undergraduate grade point average (GPA) of 3.0 on a 4.0 scale. Grades of C or better for prerequisite courses; grades of C- are not acceptable.
4. Minimum grade point average (GPA) of 3.0 on a 4.0 scale in the undergraduate major.
5. Oral and written communication skills necessary to interact with patients and colleagues.
6. Scores on the general and writing sections of the Graduate Record Examination (GRE) using the Midwestern University institution code of 1769.
  - The test must have been taken no earlier than January 1, 2016.
  - For more information about the GRE contact Educational Testing Services (ETS) at 866/473-4373 or visit [www.ets.org/gre](http://www.ets.org/gre).
7. Two letters of recommendation from individuals who can comment on academic, clinical, and professional experiences of the applicant.
8. A completed CSDCAS application.
9. An interview with faculty (invitation only).
10. During the on-campus interview day, write an essay given a clinical writing prompt (for interview candidates only).
11. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.



12. Passage of the Midwestern University criminal background check.

### **Application Process and Deadlines**

To be considered for admission to the Speech-Language Pathology Program, applicants must submit the following to the Office of Admissions:

1. **CSDCAS Application**  
Applicants are required to submit their applications to CSDCAS at <http://www.capcsd.org/csdcas> by February 1, 2021. Please refer to the CSDCAS application instructions for specific details about completing the application, required documents, and processing time. Due to the large number of applications and the limited number of seats available, applicants are encouraged to complete their CSDCAS application early in the cycle. An advantage of a centralized application service is that students can monitor the status of their applications online.
2. **Letters of Recommendation**  
Applicants are required to submit a minimum of two letters of recommendation to CSDCAS (<http://www.capcsd.org/csdcas>). The Office of Admissions will accept only letters of recommendation received via CSDCAS. Letters should be contributed from professors, speech-language pathologists, or other professionals with whom the applicant has interacted. They should address academic, clinical and professional qualities that will contribute to the applicant's readiness for graduate study. Please refer to the CSDCAS application instructions for specific guidelines and requirements for submitting letters of recommendation.
3. **GRE Scores**  
Applicants are required to submit official GRE general test and writing scores directly to Midwestern University. The MWU institutional code for submitting scores is 1769. Only scores earned during the previous five years (no earlier than January 1, 2016) and sent directly from the Educational Testing Service (ETS) will be accepted.
4. **Completed Applications**  
The Office of Admissions will send letters verifying receipt of completed CSDCAS applications to applicants who meet the minimum cumulative GPA requirement of 3.00. The letters will include instructions for checking the status of the required application materials online. Applicants are responsible for tracking the receipt of their application materials and ensuring the submission of all required documents. Only applicants who submit complete application packages will be considered for potential entrance into the Program.

*Please note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or email address. All application withdrawal requests must be made in writing via e-mail, fax, or letter to:

Midwestern University  
Office of Admissions  
555 31st St.  
Downers Grove, IL 60515  
Fax: 630/971-6086  
[admissil@midwestern.edu](mailto:admissil@midwestern.edu)

### **Interview and Selection Process**

When applicants are considered eligible for interviews after review of their completed files, they will be notified of available interview dates and invited by the Office of Admissions to schedule an on-campus interview.

A typical interview day involves participation in the following activities coordinated by the Office of Admissions: an interview with two department faculty, lunch with current Midwestern University students, a campus tour, and consultations with counselors from the Office of Admissions and the Office of Financial Aid.

During interview sessions, department faculty will engage students in conversation regarding topics relevant to educational or healthcare settings. Students will also be asked to provide a writing sample in response to a clinical prompt. Interview and writing sample responses will be evaluated using rubrics established for this purpose. Prospective student's application, interviews, and writing samples are evaluated using rubrics that were developed by the SLP Program. The Speech-Language Pathology Admissions Committee makes admission recommendations to the Program Director who submits them to the Dean of the College of Health Sciences for action. The Dean, via the Office of Admissions, notifies each applicant in writing of the admission action/decision.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) intellectual, conceptual, integrative, and quantitative; and 5) behavioral and social. Technological compensation can be made for some limitation in certain of these areas, but candidates should be able to perform in a reasonably independent manner.

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or

electronic device. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.

2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch, hearing and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks. Candidates must be able to lift 20 pounds.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt, completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for

accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Reapplication Process**

Students who receive denial or end-of-cycle letters may reapply for the following year's admissions cycle. Before reapplying, however, individuals contemplating reapplication should seek the advice of an admissions counselor. To initiate the reapplication process, prospective students must complete and submit a new application and proceed through the standard application process.

## **EVALUATION OF STUDENT PERFORMANCE**

Students in the Speech-Language Pathology Program will be evaluated based upon academic and clinical performance at regular intervals during each quarter of study and throughout their program. Both formative and summative assessment techniques will be applied. Summative assessment will include traditional grades and written feedback for individual assignments, and final course grades at the end of a term or practicum experience. Formative assessment will include regular evaluation of student performance relative to learning objectives that reflect entry-level knowledge and skills as outlined by the American Speech-Language-Hearing Association. The use of both summative and formative assessment media across academic and clinical curricula will ensure student learning and preparation to enter the field of speech-language pathology.

## **GRADUATION REQUIREMENTS**

To qualify for the Master of Science in Speech-Language Pathology (M.S.), students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 3.0;
2. Satisfactorily complete the required minimum number of 107 credit hours in the curriculum;
3. Receive a favorable recommendation for master's degree conferral from the Speech-Language Pathology Academic Review Committee and the CHS Student Promotion and Graduation Committee;
4. Receive a favorable recommendation for master's degree conferral from the University Faculty Senate;
5. Settle all financial accounts with the University; and
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## LICENSURE REQUIREMENTS

Speech-language pathologists must hold a master's or doctoral degree to be eligible for certification, licensure, and practice as a speech-language pathologist. National certification is obtained through the Council for Clinical Certification (CFCC) of the American Speech-Language Hearing Association (ASHA), which establishes the standards for certification. The CFCC awards the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP), a nationally recognized professional credential.

In addition to program coursework and practicum requirements, the standards for the CCC-SLP include passing the Praxis® Exam in Speech-Language Pathology and completing the equivalent of 36 weeks (full time) of professional experience (the "Clinical Fellowship") post graduation. The Praxis Exam is administered by the Educational Testing Service (ETS).

Speech-language pathologists must be licensed to practice in Illinois pursuant to the requirements of the Illinois Speech-Language Pathology and Audiology Practice Act (225 ILCS 110). Passing the Praxis® Exam is a requirement for licensure in most states, including Illinois.

The Illinois State Board of Education (ISBE) offers a professional educator's license for speech-language pathologists. This credential is necessary to work in Illinois public schools. The requirements of the program include a school-based practicum that will prepare students to meet the requirements for this additional credential.

Midwestern University Master's Degree in Speech-Language Pathology is designed to meet the educational requirements to become a licensed speech language pathologist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment.

Midwestern University College of Health Science has not yet made the determination that its Master's Degree in Speech-Language Pathology Program curriculum meets the territorial educational requirements for licensure or certification in the following territories: Puerto Rico and U.S. Virgin Islands. Students in the program receive a direct notification that

Midwestern University has not made a determination if their program meets the requirements in the above listed territories.

## CURRICULUM

The professional master's curriculum is composed of 54 to 57 required course credits (quarter hours) for the first academic year, 53 to 57 required course credits for the second academic year for a total of 107 to 114 quarter credits. Clinical practica are scheduled in the second, third, fourth, and fifth quarters of the curriculum. Advanced practica, or full-time placements in healthcare or educational settings, are secured for the last two quarters of the curriculum.

The Midwestern University College of Health Sciences Speech-Language Pathology Program reserves the right to alter its curriculum as appropriate for the essential professional preparation of its students.

Total Quarter Credits in the Professional Program: 107-113

The total number of quarter credits is dependent upon whether a student pursues the thesis or non-thesis track.

### First Professional Year:

Total Credit Hours Required 54-57

### Fall Quarter

CORED	1599I	Interprofessional Education I	1
SLPPD	0501	Neurological Bases of Communication Disorders	4
SLPPD	0502	Research Methods in Communication Sciences and Disorders	4
SLPPD	0519	Pediatric Speech Sound Disorders	4
SLPPD	0521	Language Disorders in Early Childhood	4
SLPPD	0540	Clinical Methods in Speech-Language Pathology	3

**Total 20**

### Winter Quarter

SLPPD	0504	Cultural and Linguistic Diversity in Communication Disorders	3
SLPPD	0511	Thesis I Thesis Track Only	2
SLPPD	0526	Aphasia	4
SLPPD	0529	Voice and Resonance Disorders	4

SLPPD	0550	Clinical Practicum I	3
SLPPD	0625	Hearing and Aural Rehabilitation	2
<b>Total</b>			<b>16-18</b>

#### Spring Quarter

SLPPD	0503	Evidence-Based Practice in Communication Sciences and Disorders	3
SLPPD	0512	Thesis II Thesis Track Only	1
SLPPD	0522	Language Disorders in School-Age Children	4
SLPPD	0525	Dysphagia I	4
SLPPD	0527	Cognitive-Communication Disorders	4
SLPPD	0552	Clinical Practicum II	3
<b>Total</b>			<b>18-19</b>

#### Second Professional Year:

Total Credit Hours Required 53-57

#### Summer Quarter

SLPPD	0613	Thesis III Thesis Track Only	1
SLPPD	0626	Autism and Other Developmental Disorders	2
SLPPD	0630	Fluency Disorders	3
SLPPD	0632	Dysphagia II	4
SLPPD	0640	Healthcare and Educational Settings	2
SLPPD	0654	Clinical Practicum III	3
<b>Total</b>			<b>14-15</b>

#### Fall Quarter

SLPPD	0604	Professional Issues and Ethics in Speech-Language Pathology	2
SLPPD	0614	Thesis IV Thesis Track Only	1
SLPPD	0628	Motor Speech Disorders	3
SLPPD	0631	Augmentative and Alternative Communication	3

SLPPD	0633	Language, Literacy and Learning	4
SLPPD	0656	Clinical Practicum IV	3
<b>Total</b>			<b>15-16</b>

#### Winter Quarter

CORED	1699I	Interprofessional Education II	1
SLPPD	0660	Advanced Practicum in Speech-Language Pathology: Public School OR	12
SLPPD	0662	Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility	12
SLPPD	0670	Thesis Continuation I Thesis Track Only	0.5
<b>Total</b>			<b>12-13.5</b>

#### Spring Quarter

SLPPD	0660	Advanced Practicum in Speech-Language Pathology: Public School OR	12
SLPPD	0662	Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility	12
SLPPD	0671	Thesis Continuation II Thesis Track Only	0.5
<b>Total</b>			<b>12-12.5</b>

## COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

#### *CORED 1599I Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease. 1 credit

*SLPPD 0501 Neurological Bases of Communication Disorders*

This course covers the neurological and physiological bases of normal and disordered communication. Embryological development of the central nervous system, and neuroanatomy and neurophysiology of the motor and sensory systems, including vision and audition are covered. Brain dissection laboratory experiences enhance mastery of neurological concepts introduced in the course. The course integrates basic neuroanatomy with cognitive neuroscience through assigned readings, lectures, and laboratory experiences.

4 credits

*SLPPD 0502 Research Methods in Communication Sciences and Disorders*

This course introduces students to research methods, including basic research concepts, common research designs, and methods of data analysis commonly used in the field of speech-language pathology. Students will learn to critically read and evaluate research manuscripts.

4 credits

*SLPPD 0503 Evidence-Based Practice in Communication Sciences and Disorders*

In this course, students will gain experience critiquing professional literature relevant to clinical and/or research practices. They will complete a literature review on a topic of interest and use it to inform evidence-based, clinical decisions.

3 credits

*SLPPD 0504 Cultural and Linguistic Diversity in Communication Disorders*

This course will instruct the student on evidence-based practices for meeting the needs of culturally and linguistically diverse populations across the lifespan. The course will focus on developing cross-cultural competence through understanding cultural diversity, multilingual acquisition, multilingualism, effective use of interpreters and translators, and service delivery strategies.

3 credits

*SLPPD 0519 Pediatric Speech Sound Disorders*

This course covers speech disorders of developmental or linguistic origin. Students will learn to assess and treat articulation and phonological impairment. Highlights include practice collecting and analyzing comprehensive speech samples, administering standardized tests, and planning therapeutic interventions specific to individual cases.

4 credits

*SLPPD 0521 Language Disorders in Early Childhood*

This course covers assessment and treatment of children with language disorders, focusing on the period from birth to age five. Language disorders experienced by children with cognitive challenge, hearing impairment, autism, other developmental disorders or traumatic brain injury will be addressed. The course will address special considerations for high-risk infants, emergent literacy, and how to work collaboratively with families to improve language and learning in the young child.

4 credits

*SLPPD 0522 Language Disorders in School-Age Children*

This course explores language disorders of school-age children and adolescents. Students will study the social, cognitive and linguistic aspects of language impairment. The interplay of language and literacy and its implications for intervention in this age group will be examined. Students will practice conversational and narrative analysis. Other formal and informal assessment methods will be reviewed, along with intervention models commonly used in school and private settings.

4 credits

*SLPPD 0525 Dysphagia I*

This course reviews the anatomy and physiology of swallowing, and disorders that impact this vital function in children and adults. Etiologies of swallowing disorders, as well as their evaluation and management will be addressed. Students will appreciate the concomitant conditions that typically accompany dysphagia, and learn to prioritize treatment objectives. Ethical considerations in swallowing intervention will also be incorporated.

4 credits

*SLPPD 0526 Aphasia*

This course examines communication disorders that result from acquired conditions, such as left or right hemisphere strokes or other acquired brain pathologies. Etiologies of these conditions, including neurological correlates for presenting symptoms, will be reviewed. Assessment and intervention models will be discussed, with attention to the cognitive, linguistic, and social aspects of resulting communication disorders.

4 credits

*SLPPD 0527 Cognitive-Communication Disorders*

This course examines communication disorders that result from acquired conditions, with emphasis on traumatic brain injury, dementia, and other degenerative neurological conditions. Etiologies of these conditions, including neurological correlates for presenting symptoms will be reviewed. Assessment and intervention models will be discussed, with attention to the cognitive, linguistic, and

social aspects of resulting communication disorders.  
4 credits

*SLPPD 0529 Voice and Resonance Disorders*

This course teaches evaluative and therapeutic aspects of voice and resonance disorders. Students examine the anatomical and physiological correlates of phonation and oral/nasal resonance. Embryology of the vocal mechanism is reviewed, including nasal, oropharyngeal, laryngeal, and pulmonary regions. Assessment and intervention of a variety of common voice/resonance disorders will be covered, including laryngectomy, cleft lip/palate, vocal fold hyperfunction, and therapies associated with a variety of neurogenic communication disorders.  
4 credits

*SLPPD 0540 Clinical Methods in Speech-Language Pathology*

This course reviews general procedures for assessing and treating individuals with communication disorders. Techniques for administering and interpreting formal and informal measures of communicative behavior and the basics of treatment procedures are discussed. The basics of clinical writing are covered, highlighting preparation of documents that support the assessment and treatment process. The course is supplemented by supervised observation and/or shadowing experiences in the Midwestern University Speech-Language Institute or off-site school or healthcare locations.  
3 credits

*SLPPD 0550 Clinical Practicum I*

This is the first of four supervised part-time speech-language pathology practicum experiences in the Midwestern University Multispecialty Clinic or other community-based sites. Students will learn how to plan and conduct assessment and intervention sessions for clients with communication disorders. One hour meetings will be included to review practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases in grand rounds fashion. Essential functions for clinical performance will be covered, in addition to standards for ethical practice.  
3 credits

*SLPPD 0552 Clinical Practicum II*

This is the second of four supervised part-time speech-language pathology practicum experiences in the Midwestern University Multispecialty Clinic or other community-based sites. Students will learn how to plan and conduct assessment and intervention sessions for individuals with communication disorders. One hour meetings will be included to provide an opportunity for students to review practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases in grand rounds fashion. Working independently and as a member of an inter-disciplinary team

will be explored.  
3 credits

*SLPPD 0604 Professional Issues and Ethics in Speech-Language Pathology*

This course focuses on the scope of practice for the speech-language pathology profession. Students will explore expectations for professional behavior based upon standards of practice and the ASHA Code of Ethics. Ethical dilemmas will be debated in preparation for a variety of clinical experiences. Procedures for obtaining the ASHA Certificate of Clinical Competence, state licensure, and school certification will be reviewed.  
2 credits

*SLPPD 0625 Hearing and Aural Rehabilitation*

This course will teach basic methods for addressing the communication needs of individuals with hearing impairment and/or central auditory processing disorders. Students will learn how to read and interpret basic audiometric test results in order to recommend appropriate communication therapy. Communication modalities for individuals with hearing loss, and a variety of therapy methods to enhance language comprehension and production will be covered. Maintenance of amplification devices, collaboration with families and educators, and counseling for individuals with hearing loss will also be included.  
2 credits

*SLPPD 0626 Autism and Other Developmental Disorders*

This course examines pediatric communication disorders related to the autism spectrum, genetic syndromes, and craniofacial anomalies. Etiologies of these conditions and comorbid disorders will be discussed. Assessment and intervention models will be reviewed.  
2 credits

*SLPPD 0628 Motor Speech Disorders*

This course covers assessment and treatment of neurogenic speech disorders, including the various types of dysarthria and apraxia. The complex process of differential diagnosis of these conditions will be addressed, along with numerous treatment approaches designed to target respiration, phonation, articulation, resonance and prosodic components of motor speech disorders.  
3 credits

*SLPPD 0630 Fluency Disorders*

This course describes the nature and proposed etiologies of stuttering and associated disorders. Assessment and treatment of children and adults with fluency disorders will be addressed, including the need for counseling and ongoing management across the lifespan.  
3 credits

*SLPPD 0631 Augmentative and Alternative Communication*

This course will address the complex communication needs of individuals with severe communication, sensory and/or physical impairments which may necessitate the use of augmentative and alternative communication systems (AAC). Students will become familiar with various types of assistive technologies used for AAC. The course will cover cognitive, educational, physical, psychosocial, and linguistic aspects of human behavior that impact AAC selection and implementation. AAC assessment and intervention strategies will be addressed, including interdisciplinary contributions from physical and occupational therapists.

3 credits

*SLPPD 0632 Dysphagia II*

This course will require students to apply knowledge to clinical cases. Students will be expected to generate diagnostic reports and treatment plans targeting pediatric and adult dysphagia. Interpretation of videofluoroscopic and endoscopic swallowing assessments will assist students in profiling phase-specific sensory and motor swallowing abnormalities. Complex cases will be addressed.

4 credits

*SLPPD 0633 Language, Literacy and Learning*

This course provides students with the theoretical models of language, literacy and learning. Examination of the interconnections between reading, writing, speaking and listening will be explored. The patterns of child and adolescent reading and writing are emphasized.

4 credits

*SLPPD 0640 Healthcare and Educational Settings*

This course focuses on speech-language pathology practice within healthcare and educational settings, to better prepare students to work in these environments. Topics covered will include terminology, legislation and regulations, oversight and responsibilities, interprofessionalism, and documentation required for effective practice.

2 credits

*SLPPD 0654 Clinical Practicum III*

This is the third of four supervised part-time speech-language pathology practicum experiences in the Midwestern University Multispecialty Clinic or other community-based sites. Students will learn how to plan and conduct assessment and intervention sessions for clients with communication disorders. One hour meetings will be included to provide an opportunity for students to review practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases in grand rounds fashion. Addressing the needs of complex cases will be explored.

3 credits

*SLPPD 0656 Clinical Practicum IV*

This is the last of four supervised part-time speech-language pathology practicum experiences at the Midwestern University Clinic or other community-based sites. Students will learn how to plan and conduct assessment and intervention sessions for clients with communication disorders. One hour meetings will be included to provide an opportunity for students to review practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases in grand rounds fashion. Continuing to learn how to address the needs of complex cases will be explored.

3 credits

*SLPPD 0660 Advanced Practicum in Speech-Language Pathology: Public School*

This is a supervised clinical experience in speech-language pathology in a public school setting. Students will acquire experience in individual and group therapy, assessment and consultation. This course consists of a 12 week, full-time school site placement. May be taken before or after SLPPD 0662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility.

12 credits

*SLPPD 0662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility*

This is a supervised clinical experience in speech-language pathology in a healthcare setting. Students will acquire experience in individual and group therapy, assessment, consultation and interdisciplinary staffing. It consists of a 12 week, full-time clinical site placement. Note: May be taken before or after SLPPD 0660 Advanced Practicum in Speech-Language Pathology: Public School.

12 credits

## ELECTIVE COURSE DESCRIPTIONS

*CORED 1699I Interprofessional Education II*

This course will provide students, working in interprofessional teams, opportunities to learn and provide integrated, patient-centered care in the development of therapeutic care plans using a team-based approach. Active learning techniques, interprofessional learning, and clinical simulation will be used to enhance the education of learners to effectively engage in problem solving and communication activities that address current health related issues in the care of humans, animals, and the environment.

1 credit

*SLPPD 0511 Thesis I*

This course is required by all students electing the thesis track. It involves one hour of class attendance in which thesis students will work together to develop their research

questions and methods, and one hour of independent study. Students will work with the Program Director to secure a Thesis Chair and two other faculty members to comprise their thesis committee. Students will meet with their Thesis Chair to devise an original research project, timeline, and budget. Completion of a literature review, rationale for research, and research plan is expected this term.  
2 credits

*SLPPD 0512 Thesis II*

This course is required of all students completing a master's thesis. It again involves one hour per week of class attendance in which students will review the technicalities of writing and formatting a professional manuscript. One hour of independent study with the Thesis Chair is also incorporated into this thesis experience. Completion of the first three chapters of a five chapter manuscript is expected, along with a timeline for collection of data.  
1 credit

*SLPPD 0613 Thesis III*

This course is for all students on the thesis track. It involves one hour per week of independent study with the Thesis Chair. Completion of data collection and analysis is expected this term. Students should complete a draft of the final two chapters.  
1 credit

*SLPPD 0614 Thesis IV*

This course is required of all students completing a master's thesis. It involves one hour per week of independent study with the Thesis Chair. Students should complete revision of their document and defend their thesis this term.  
1 credit

*SLPPD 0670 Thesis Continuation I*

This course is reserved for SLP students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed all other required coursework and are enrolled in Advanced Practicum courses. This is considered an extension of the thesis and must be approved by the Program Director.  
0.5 credits

*SLPPD 0671 Thesis Continuation II*

This course is reserved for SLP students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed all other coursework and are enrolled in Advanced Practicum courses. This is considered an extension of the thesis and must be approved by the Program Director.  
0.5 credits

*SLPPD 0800 Independent Study*

This course is designed to facilitate scholarly inquiry into a topic related to a specific component of speech-language pathology theory and practice. Course content, assignments and learning outcomes are developed in collaboration with the faculty mentor and the student, and the Program Director must approve the plan. Course credit is variable depending on the scope of work to be accomplished.  
1-3 credits

## FACULTY

**Judith F. Ball, M.S., CCC-SLP**

Illinois State University  
Clinical Associate Professor

**Megan E. Cuellar, Ph.D., CCC-SLP**

University of Tennessee  
Associate Professor

**Christina del Toro, Ph.D., CCC-SLP**

University of Florida  
Associate Professor

**Patricia J. Gibbons, D.H.S., CCC-SLP**

Northwestern University  
Associate Professor

**Nicole Gilbert, M.A., CCC-SLP**

Northern Illinois University  
Clinical Assistant Professor

**Kimberly S. Hoffer, M.A., CCC-SLP**

Northwestern University  
Director of Clinical Education and Associate Professor

**RaMonda Horton, Ph.D., CCC-SLP**

University of Wisconsin/Madison  
Associate Professor

**Laura McQuade, M.A., CCC-SLP**

Northwestern University  
Clinical Assistant Professor

**Kathleen Post, M.S., CCC-SLP**

University of Wisconsin-Stevens Point  
Clinic Coordinator and Associate Professor

**Meredith Saletta, Ph.D., CCC-SLP**

Purdue University  
Assistant Professor

**Jonathan P. Wilson, Ph.D., CCC-SLP**

University of Florida  
Program Director



# COLLEGE OF GRADUATE STUDIES

## MISSION

Established in 2018, the College of Graduate Studies (CGS) offers degrees on both campuses and upholds academic excellence by pursuing the advancement of knowledge as part of the academic triad of education, research, and service. The College endeavors to share existing knowledge, to create new knowledge, and to apply knowledge that contributes to improving the health of humans, animals, and the environment through One Health principles and practice.

## STUDENT ACADEMIC POLICIES

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### Academic Monitoring

All students enrolled in CGS are expected to:

1. Maintain satisfactory academic progress in their course of study.
2. Understand and meet all established program/College academic and professional requirements and standards as described in course syllabi, program-related manuals, University Catalog, and Student Handbook.
3. Self-monitor their academic performance in all required courses.
4. Complete all course-related requirements in a timely and satisfactory manner.
5. Seek assistance if encountering academic difficulty.
6. Contact their Program Director and/or course coordinator/director when performance has been unsatisfactory.
7. Check University e-mail account daily for information. This is particularly important at the

end of the quarter and during quarter breaks when information concerning academic performance may be distributed.

### Academic Review and Progression

The academic progress of each student enrolled in the College is regularly monitored to determine whether the student is making satisfactory academic progress in his/her program of study based on criteria established by the program/College. The academic review process occurs at two levels: the Student Promotion and Graduation Committee, and the CGS Dean.

### CGS Student Promotion and Graduation Committee

The University Faculty Senate appoints this committee annually as one committee across campuses. The minimum membership consists of 2 faculty members from each CGS Program (2 AZ Biomedical Sciences, 2 IL Biomedical Sciences, 2 Master of Public Health, 2 Precision Medicine) with representation from each campus, and at least 1 basic science faculty member from each campus. The Dean of CGS (or designee), the Dean of Students (or designee), and the Registrar (or designee) are Ex Officio nonvoting members. Each campus has a subcommittee of at least 5 members from that campus. The CGS Dean appoints a co-chair (program director or faculty member) from each campus. The committee will review and act on the academic progress of students enrolled in a cross-campus program, and the subcommittee will review and act on the academic progress of students enrolled in a campus-specific program. The committee or subcommittee may request that a course director and/or faculty advisor attend the meeting to provide additional information about the student's case. When the academic status of a dual-degree student is under review, a representative from the respective primary healthcare professional degree program is invited as a nonvoting member.

At the end of each quarter and more often if necessary, this committee or subcommittee reviews and acts upon the academic progress of each student enrolled in the College as well as other factors such as professionalism. If satisfactory, the committee or subcommittee recommends progression of the student to the next quarter. If unsatisfactory, the

committee or subcommittee decides whether a student is placed on academic warning, academic probation, extended program, academic leave of absence, or is dismissed. These decisions are forwarded to the student and the Dean of CGS. Following notification, a student may appeal the Committee's decision to the Dean who will make a final determination but may, at their discretion, also form an ad hoc committee to review the appeal. The CGS Dean is responsible for reviewing all decisions for consistency with stated College academic policies and practices. The Dean makes the final decision on the appeals and action to be taken.

At the end of each academic year, the CGS Student Promotion and Graduation Committee or subcommittee reviews the academic and professional progress and performance of each student. For dual degree students, input from the primary healthcare professional degree program representative will be considered in determining actions, and academic progress in the primary healthcare professional degree program takes precedence over the secondary CGS degree program. If satisfactory, the committee or subcommittee recommends promotion of the student. In addition, the committee or subcommittee meets each spring, or as needed, to recommend for graduation all students who have satisfactorily completed all degree requirements specified

by their program. The committee's or subcommittee's recommendations are forwarded to the CGS Dean and the University Faculty Senate for approval. The co-chairs of the committee are responsible for submitting minutes of each meeting to the CGS Dean.

### **Satisfactory Academic Progress**

To achieve satisfactory academic progress, a student enrolled in a CGS program must pass all courses and maintain the following minimum cumulative grade point average (GPA) as established for each CGS program:

- Master of Arts in Biomedical Sciences: 2.75 GPA or higher
- Master of Biomedical Sciences: 2.75 GPA or higher
- Master of Public Health: 2.5 GPA or higher
- Master of Science in Precision Medicine: 2.5 GPA or higher
- Post-Graduate Certificate in Precision Medicine: 2.5 GPA or higher

## Academic Progress

Outcome	Usual Action <sup>1</sup>	Transcript Notation
No course failures; and maintain minimal cumulative GPA <sup>2</sup>	Allowed to progress to the next quarter	---
No course failures; and one quarter of cumulative GPA less than minimum allowed <sup>2</sup>	Academic warning for the subsequent quarter of enrollment	Academic warning is not noted on the transcript.
One course failure <sup>3</sup> ; and/or two quarters of cumulative GPA less than minimum allowed <sup>2</sup>	Academic probation for the subsequent quarter or until all academic requirements are met. In addition, one or more of the following may apply:  a) Retake of the failed course if eligible and/or if the course is required  b) Academic leave of absence for up to one year until course is retaken or any requirements for re-entry established by the program have been met  c) Extended program  <i>Note:</i> Students on an extended program may be subject to academic LOA or dismissal after additional course failures or failure to maintain the required cumulative GPA.	"F" grade is listed on transcript and is counted toward GPA calculation and total number of accumulated failures. Following successful retake of the course, the original "F" remains on the transcript as an "F" but is no longer factored into the GPA.
Three or more quarters of cumulative GPA less than minimum allowed <sup>2</sup>	a) Academic probation for the subsequent quarter or until all academic requirements are met, or  b) Academic leave of absence <sup>4</sup> and academic probation, or  c) Extended program and academic probation, or  d) Dismissal	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.
Two or more course failures <sup>3</sup>	a) Academic leave of absence <sup>4</sup> and academic probation, or  b) Extended program and academic probation, or  c) Dismissal  <i>Note:</i> Two or more course failures will typically result in dismissal.	Academic probation and extended program are not noted on transcript. Academic leave of absence and dismissal are noted on transcript.

<sup>1</sup>The CGS Student Promotion and Graduation Committee may decide from any of the options listed among the usual actions described for each academic situation under review.

<sup>2</sup>Minimum cumulative GPA for Master of Arts in Biomedical Sciences is 2.75; Minimum cumulative GPA for Master of Biomedical Sciences is 2.75; Minimum cumulative GPA for Master of Public Health is 2.50; Minimum cumulative GPA for Master of Science in Precision Medicine is 2.50; Minimum cumulative GPA for Post-Graduate Certificate in Precision Medicine is 2.50.

<sup>3</sup>WF may be considered as a course failure by CGS Student Promotion and Graduation Committee.

<sup>4</sup>May or may not be preceded by academic warning or probation.

### **Unsatisfactory Academic Progress**

If a student fails to make satisfactory progress in completing his/her prescribed course of study, the student is placed on academic warning, academic probation, extended program, academic leave of absence, or is dismissed. The CGS Student Promotion and Graduation Committee may recommend any of the options listed among the usual actions described for each academic situation under review.

Additionally, for CGS dual degree students, academic progress in their primary healthcare professional degree program takes precedence over the secondary degree program. Dual degree students not sustaining sufficient academic progress in their primary degree program may be placed on an academic leave of absence from the secondary CGS degree program until academic deficiencies in the primary degree program are corrected, and the student returns to good academic standing, as defined by the primary degree program. The Student Promotion and Graduation Committee for the primary degree program communicates student academic status updates to the CGS Student Promotion and Graduation Committee.

Students will be notified by the CGS Dean when they are placed on academic warning as a result of their failure to achieve the required minimum cumulative GPA established by their program. Any student with academic deficiencies to be addressed by the CGS Student Promotion and Graduation Committee shall be notified in writing by campus e-mail by the Chair of the CGS Student Promotion and Graduation Committee at least two business days in advance of the scheduled meeting in which the student's case will be heard. The student may request and shall be permitted to appear before the CGS Student Promotion and Graduation Committee (in person or via telephone) to present his/her case in matters that could result in academic probation, academic leave of absence, dismissal or any matter that could result in a permanent annotation on the student's transcript. In such instances, the student shall inform the Chair of the CGS Student Promotion and Graduation Committee in writing, of his/her desire to appear before the committee or his/her intent to waive this right. If the student chooses to appear before the committee, this prerogative extends to only the involved student and not to any other individuals. A student whose academic progress will be subject to review by the CGS Student Promotion and Graduation Committee and who wishes to appeal a course grade must do so in an expedited manner prior to the scheduled meeting of the Committee. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Grade Appeals Policy.

Within two working days following the committee meeting, the chair of the CGS Student Promotion and Graduation Committee is responsible for providing notification via campus email to the involved student, informing him/her of

the committee's decision. In all instances, the chair of the CGS Student Promotion and Graduation Committee shall be responsible for informing the CGS Dean of each decision made by the committee. Following notification of the decision by the CGS Student Promotion and Graduation Committee, a student may appeal the decision to the CGS Dean (see Appeal Process). The Dean is responsible for reviewing all decisions for consistency with stated College academic policies and practices. The Chair of the CGS Student Promotion and Graduation Committee is responsible for providing written notification of the decision to all appropriate academic support offices (i.e., Registrar, Student Financial Services, etc.).

### ***Academic Warning***

Academic warning is a formal notification of substandard academic performance and cautions the student that continued performance at this level might result in academic probation. An academic warning is issued when a student earns a cumulative GPA below the minimum required by his/her respective program for one quarter and/or when the student fails to meet any other established program academic requirements. An academic warning is in effect for the subsequent quarter of enrollment. Academic warning is not noted on the student's transcript but is noted in the student's academic file that is kept in the program office. If the student achieves the minimum standard of academic performance required by the program during the quarter of academic warning, the student is returned to good academic standing. This is also noted in the student's file.

### ***Academic Probation***

Academic probation represents notice of unsatisfactory academic progress. Academic probation typically occurs when the student fails a class during his/her academic program and/or earns a cumulative GPA below the minimum required by his/her respective program for two quarters (which do not have to be consecutive) and/or when the student fails to meet any other established program academic requirements. A WF may be considered as a course failure by the CGS Student Promotion and Graduation Committee. Academic probation is not noted on the student's transcript but is noted in the student's academic file in the program office. The student remains on academic probation until the failure is successfully repeated and/or the cumulative GPA is at or above the program's required minimum and all deficiencies have been corrected. Subsequently, when the student is returned to good academic standing, this is also noted in the student's file.

### ***Extended Program***

When a student is not allowed to progress in the standard program curriculum due to course failure; failure to maintain the required cumulative GPA for two or more quarters; failure to meet any other established program academic requirement; or upon request due to extenuating personal

circumstances, the CGS Student Promotion and Graduation Committee may place the student on an extended program. While on an extended program, students may be permitted to take courses and/or to retake courses in which they have received a grade of "C" or less, as approved by their CGS program. Students will be able to resume the standard program curriculum upon successful completion of all programmatic requirements. Extended program is not noted on the student's transcript. Leave of absence will be noted on the transcript for periods of non-enrollment during the extended program period for stand-alone degree students. No notation will be made on transcripts of a dual degree student who is concurrently taking coursework in their primary healthcare professional degree program.

#### ***Academic Leave of Absence***

Academic leave of absence may occur when a student has failed one or more courses, has accumulated two or more quarters with a cumulative GPA less than required by his/her program, or has not met programmatic criteria required to proceed in the curriculum. Academic leave of absence may or may not be preceded by academic probation. This action results in the suspension of the student from all academic courses for a period of up to one year, or until all program requirements for re-entry have been fully met. A mandatory academic leave of absence is noted on the student's transcript.

The student who has been placed on a mandatory academic leave of absence does not have to re-apply for admission and is guaranteed reentry into his/her academic program upon successful completion of all failed required courses and/or when all programmatic requirements are met. Upon reentry to the academic program, the student is routinely placed on academic probation for the following quarter.

#### ***Academic Dismissal***

A student may be dismissed from the College for academic reasons upon the decision of the CGS Student Promotion and Graduation Committee. The dismissal is based on the determination that the student has not satisfactorily demonstrated that the student can successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program (see "Professional Conduct"). Students who accumulate two or more failures or three quarters below the minimum required grade point average may be dismissed. The course failures and/or the three-quarters with less than the required minimum cumulative GPA do not have to be consecutive.

#### ***Retake of a Failed Course***

If a student passes a repeated course, the original failure remains on the transcript as an "F" grade and is included in the total number of accumulated failures in the student's academic record. The grade from the original failed course is no longer used in the computation of the GPA following

repeat of the course. The grade from the repeated course will be factored into the overall GPA.

Under exceptional circumstances, such as academic probation or extended program, students may retake a Midwestern University course in which they have earned a "C". The Program Director and the CGS Dean must approve this retake option. Typically, a maximum of three courses with "C" grades can be retaken, and a course may only be retaken once. The original "C" grade will remain on the transcript but will not be used in the computation of the GPA following the completion of the repeated course. The new grade will be factored into the overall GPA. All repeated courses are subject to additional tuition. Students should consult with their financial aid advisor regarding the financial implications of repeated coursework.

With program approval, the CGS may allow students to take equivalent courses at another accredited university as a replacement for a failed course or for the purpose of raising their cumulative GPA to the program minimum. In order to qualify as replacement credits, such courses must be at the graduate level and must be approved by the CGS Program Education Committee and Program Director before the grades can be accepted for transfer. These courses and assigned grades will be recorded on the transcript along with the equivalent Midwestern University courses and assigned grades. The original "C" and "F" grades will remain on the transcript but only the new grades will be factored into the overall GPA.

#### ***Readmission After Dismissal for Poor Academic Performance***

It is at the discretion of the Program to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit a new application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek the advice of an admissions counselor. It is expected that the individual would have addressed documented deficiencies before reapplication and be able to demonstrate that they meet all admission requirements and technical standards of the program.

The program's Admissions Committee will review completed applications of candidates and submit recommendations to the Program Director for action. The CGS Dean, via the Office of Admissions, then notifies applicants in writing of admission decisions. No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Reapplications are allowed only within the first two years following dismissal and readmission will be granted only once.

### **Advanced Placement/Exemption from Coursework**

The CGS Program may allow for the transfer of credits from graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. The Program decides upon all requests for advanced placement by newly admitted students on a course-by-course basis. To request such consideration, a student must submit a letter of request to the Program Director in which the student lists a course(s) previously taken which might be similar in content to the Midwestern University professional course(s) that the student is scheduled to take. The student must also provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken. The Program Director will share the submitted course materials with the appropriate course director to determine if the course(s) is an appropriate substitute. All requests must be submitted prior to matriculation. Typically, advanced placement will only be considered for coursework in which a minimum letter grade of "B" has been earned. A "C" letter grade is not acceptable for advanced placement consideration. If the Program denies the request for advanced placement, the student may appeal this decision to the CGS Dean.

If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement (AP) notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation. Further details may be found in the individual CGS program catalogs.

### **Coursework Completed in Midwestern University Professional Programs**

For CGS dual degree students enrolled in a Midwestern University healthcare professional degree program, coursework completed in the healthcare professional degree program may be applied towards the CGS degree. Further details may be found in the individual CGS program catalogs.

### **Appeal Process**

Following notification of a decision from the CGS Student Promotion and Graduation Committee, a student may appeal. The student has three working days to submit a formal written appeal of the Committee's decision to the Dean. The appeal must be submitted in writing and delivered to the Office of the Dean within this three-day period. A narrative explaining the basis for the appeal should accompany the request. An appeal must be based on one of the following documented premises:

1. Bias of one or more members of the CGS Student Promotion and Graduation Committee  
*Note: The student must present specific evidence that the committee member(s) demonstrated bias*

*against him/her in conducting the academic review process*

2. Material, documentable information not available to the committee at the time of its initial decision.  
*Note: The student must provide a detailed explanation of why the new information is relevant and why it was not made available to the committee members during the academic review process. The student should be prepared to produce pertinent documentation at the appeal meeting.*
3. Procedural error.  
*Note: The student must provide evidence that the committee did not correctly follow the procedures related to the conduct of the academic review process; for example, the student was not given notice of the meeting or committee recommendation in accordance with stated policies.*

Upon receipt of the student's appeal, the Dean will consider the appeal and may, at their discretion, form an *ad hoc* appeal committee. In all cases, the Dean must make a decision, typically within ten working days, and then notify the student, the Chair of the CGS Student Promotion and Graduation Committee, and all appropriate support offices via campus email. The decision of the Dean is final.

Students must attend all didactic courses in which they are registered until the appeal process is complete. Students who fail a required or prerequisite course should consult with the Program Director regarding attendance in courses in the subsequent quarter.

### **Auditing a Course for Remedial Purposes**

The CGS Student Promotion and Graduation Committee may determine that a student should be enrolled in a previously taken course on a temporary, audit basis. Under these circumstances, a student can attend classes and labs, receive course materials, and participate in exams to assess learning on an informal, non-graded basis. No course credits or grade may be earned for an audited course. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Course Auditing Policy.

**Faculty Advisor Program**

The CGS Program assigns a faculty advisor to students in each entering cohort. The responsibilities of the faculty advisor are as described below. In addition to these faculty advisors, the CGS Dean's Office and the Dean of Students are also available to assist students. It is the student's responsibility to initiate contact with the faculty advisor for assistance.

The responsibilities of CGS faculty advisors include:

1. Serving as the student's advisor and academic/professional counselor;
2. Overseeing and monitoring the academic progress and professional growth of the student;
3. Assisting the student in seeking academic and personal counseling services provided by the institution;
4. Serving as an advocate for the student;
5. Providing career counseling to the student.

## Grades

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93-100	4.000	-
A-	90-92	3.670	-
B+	87-89	3.330	-
B	83-86	3.000	-
B-	80-82	2.670	-
C+	77-79	2.330	-
C	70-76	2.000	-
F	< 70	0.000	-
I	-	0.000	An Incomplete grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades will be resolved within 10 calendar days from the end of the final examinations for the quarter or they will automatically be converted to a grade of "F". In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with a notice to the Registrar.
IP	-	0.000	An In-Progress grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	-	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of "P" is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	-	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	-	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
WF	-	0.000	Withdrawal Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the program. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation. "WF" may be considered as a failure by the CGS Student Promotion and Graduation Committee. Multiple "F's" and "WF's" may be grounds for dismissal.
AU	-	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter.
AP			This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement is applied toward credit hour accruals, but is not counted in the GPA calculation.



**Grade Point Average**

The grade point average (GPA) is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated initially at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or accepted for advanced placement or for courses with a grade of withdrawal (W), withdrawal failing (WF), or pass (P). Additionally, failing (F) grades for courses that are successfully repeated are not included in the GPA. Under exceptional circumstances and with the approval of the Program Director and Dean, students may retake a course in which they received a grade of "C". In such cases, the original grades remain on the transcript but only the new grades are used in the computation of the GPA.

**Transfer Policy (Intercampus)**

CGS performs prematriculation criminal background checks as described in the Midwestern University policies.

**Graduation**

The following degrees and certificate will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements: Master of Biomedical Sciences (M.B.S.) and Master of Arts in Biomedical Sciences (M.A.), Master of Public Health (M.P.H.), Master of Science in Precision Medicine (M.S.), and Post-Graduate Certificate in Precision Medicine (PGCert).

**Immunization Policy**

Students enrolled in a program without a clinical component are required to follow the immunization policy, as outlined in the Student Handbook, but are not required to have titers.

**Leave of Absence**

Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Leave of Absence Policy. Before voluntarily requesting a leave for personal reasons or after being placed on a mandatory leave for academic reasons, a student must make an appointment with the appropriate Program Director and representative from the Dean's Office to discuss the implications of the leave of absence and a revised program of study, if applicable. Typically, a single leave of absence will not exceed 12 months, and consecutive or multiple interrupted leaves of absence will not exceed 18 months. Periods of non-enrollment do not count towards the minimum allotted time for completion of academic programs.

**Professional Conduct**

Students are expected to emulate the legal, moral, and ethical standards expected of professionals and display behavior that is consistent with these qualities. A Code of Responsibilities and Rights of the Students of Midwestern University is included in Appendix 1 of the MWU Student Handbook. This code clearly states the mode of behavior that is expected of students and covers both on-campus and off-campus activities. Students are expected to read and follow this code.

Unsatisfactory professional behavior, as defined in Appendices 2 and 4 of the MWU Student Handbook, is subject to disciplinary sanctions that may preclude a student's academic progress in their program of study. The Dean of Students investigates formal complaints concerning student misconduct and recommends disciplinary action to the CGS Dean. A student who is found to have engaged in improper conduct is subject to disciplinary action which includes, but is not limited to, disciplinary warning/probation, temporary suspension, or dismissal. Disciplinary warning and probation are not noted on the transcript but are kept in the student's disciplinary file. Suspension and dismissal as a result of disciplinary action are noted on the student's transcript. Disciplinary information may be shared with sites that are affiliated with Midwestern University educational programs.

# MASTER OF BIOMEDICAL SCIENCES PROGRAM

## MISSION

The Midwestern University Master of Biomedical Sciences Program provides students with an in-depth education in the biomedical sciences, offers significant experience in laboratory research, and graduates students who are competitive applicants for admission into professional programs in healthcare.

## DEGREE DESCRIPTION

The Master of Biomedical Sciences Program is a full-time, graduate-level program that provides the student with laboratory experiences, research skills, and a broad background in the biomedical sciences. Successful completion of the program leads to a Master of Biomedical Sciences degree (MBS). The program has two main purposes. First, it provides a significant experience in performing basic and translational laboratory research. MBS students are required to write a thesis and will orally defend their research work before a faculty committee prior to graduation. This affords graduates with technical skills and expertise to function in a variety of biomedical professions. These include careers in areas such as technicians and supervisors in the biotechnology and pharmaceutical industry, research personnel in biomedical science laboratories, employees in governmental and regulatory agencies, and undergraduate teaching. Second, the program is also designed to help students with undergraduate degrees improve their academic foundation in the biomedical sciences, thereby strengthening their application to graduate research and health professions programs.

The 72 quarter-hour curriculum is usually completed in 21 months. Students who need more than 21 months to complete the program will be required to enroll in a thesis continuation course. Students must complete the program within four years of matriculation, excepting approved leaves of absence. All students are required to complete a research project approved by the student's thesis committee. The required curriculum includes seven basic science courses in biochemistry, genetics, immunology, microbiology, and physiology. In addition to the basic science courses, the student must take a series of research courses that prepare the

student for a research project and thesis that is the culmination of the degree program. The research courses include Research Design and Methodology, Principles of Biostatistics, Literature Review, Journal Club, Seminars in Biomedical Sciences, Fundamentals of Research, Ethics of Research and Experimentation, Thesis Proposal, Laboratory Research, and Thesis. A series of electives are available to complete the 72 quarter-hour requirement. The electives allow the student to further specify an area of interest to better prepare them for a career in their chosen field. A dual degree option is available to enrolled MBS students who are accepted into another professional program on the Midwestern University Downers Grove campus.

The Master of Biomedical Sciences Program will also benefit students who wish to improve their credentials for application to medical school, dental school or other health professions program. The Master of Biomedical Sciences Program allows students to demonstrate their ability to perform at a graduate level, improve their GPA, better prepare for the professional entrance exam and take courses that broaden their undergraduate coursework.

## ADMISSIONS

### Admission Requirements

To be considered for admission to the Master of Biomedical Sciences Program, an applicant must have:

1. A bachelor's degree or higher from a regionally accredited college or university.
2. A minimum cumulative GPA of 2.75 on a 4.00 scale.
3. Test scores from either:
  - Graduate Record Examination general test (GRE) using the institutional code for Midwestern University of 1769. Contact Educational Testing Services (ETS) at 866/473-4373 or visit <http://www.ets.org>.
  - OR
  - Medical College Admission Test (MCAT) scores. Contact the MCAT Program Office at 202/828-0690 or visit <http://www.aamc.org/students/applying/m>

- cat  
OR
  - Dental Admission Test (DAT) scores. Contact the American Dental Association (ADA) at 312/440-2500 or visit [www.ada.org](http://www.ada.org).  
OR
  - Pharmacy College Admissions Test (PCAT) scores. Contact Harcourt Assessment, Inc. (also known as Pearson) at 800/627-7271 or visit [www.pcatweb.info](http://www.pcatweb.info).  
OR
  - Optometry Admissions Test (OAT) scores. Contact Optometry Admission Testing Program at 800/232-2159 or [www.opted.org](http://www.opted.org)
4. One letter of recommendation from a prehealth advisor or committee, science professor, or health professional.
  5. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation.
  6. Commitment to abide by the Northwestern University Drug-Free Workplace and Substance Abuse Policy.
  7. Passage of the Northwestern University criminal background check.

### Application Process and Deadlines

To be considered for admission into the Master of Biomedical Sciences Program, applicants must submit their application:

Apply through the Post Baccalaureate Centralized Application Service (PostBacCAS); <https://postbaccas.liaisoncas.com/applicant-ux/#/login>). PostBacCAS allows students to learn about, compare, and apply to a number of post baccalaureate programs through one centralized application.

Requirements for application include:

1. One letter of recommendation. The Office of Admissions will accept signed and sealed letters from prehealth advisors or committees, science professors, and health professionals.
2. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation from every undergraduate, graduate, or professional school that they have attended or are currently attending. These transcripts must be sealed and signed by the registrar at each institution.
3. Scores from one of the following: the Medical College Admissions Test (MCAT), Pharmacy

- College Admissions Test (PCAT), Graduate Record Examination (GRE), Dental Admissions Test (DAT), or Optometry Admissions Test (OAT).
4. The deadline for submitting a completed application is July 15.

### Send application materials to:

Midwestern University  
Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
800/458-6253  
[admissil@midwestern.edu](mailto:admissil@midwestern.edu)

*Please Note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address. All requests for applications withdrawal must be made in writing.

### Selection Process

The Master of Biomedical Sciences Program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The Master of Biomedical Sciences Program begins in the Fall Quarter. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee feels would benefit the most from the Program. Selection decisions for the Program are made by the Biomedical Sciences Program Admissions Committee with the approval of the Program Director and the Dean of the College of Graduate Studies until the class is filled. To maximize their competitiveness within the rolling admission process, candidates are advised to submit their completed applications early in the admission cycle.

After receiving completed application packets, the information provided is verified, including the cumulative GPAs for applicants for all completed courses. Completed applications are forwarded to the Biomedical Sciences Program Admissions Committee. Applicants will receive notification in writing of admissions decisions.

*Please Note:* Applicants may track the receipt of their application materials and the status of their files on the University's website. Instructions for accessing account information will be sent to the applicant by the Office of Admissions after receipt of the application. Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address or e-mail address.

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Dual Degree Option**

The Biomedical Sciences Program offers an educational opportunity to current MBS students applying to other colleges at Midwestern University. The following policies apply:

1. Current MBS students must apply and be accepted into a clinical program on the Downers Grove campus.
2. The clinical degree program will be considered the primary degree program and the Biomedical Sciences Program the secondary degree program. Continuity of the primary degree program must be maintained.
3. The length of the secondary program will be extended for a time period sufficient to complete the secondary degree program. This may take up to a year depending upon the primary program. Programs may be individualized to accommodate availability of desired courses, academic proficiency, and student preferences. As a secondary degree program, the Biomedical Sciences Program degree must be completed within a total of five years from initial matriculation.
4. Students must maintain the minimum cumulative GPA requirements of each program. Failure to maintain the minimum cumulative GPA in either program will result in an academic action.
5. The number of credits required for completion of the Biomedical Sciences Program is 72 quarter hours. Some courses from dual degree students' clinical degree program may be deemed suitable for credit in the Biomedical Sciences Program degree program. If approved, these courses may be substituted for credit in the Biomedical Sciences. No Biomedical Sciences Program tuition will be charged for these credits.
6. In addition to the established quarterly tuition for the primary degree program, students enrolled in the dual degree program shall pay tuition to the Master of Biomedical Sciences program on a per credit basis. Dual degree students shall receive a 30% discount on the usual Master of Biomedical Sciences Program per credit hour charge for the full duration of their Master of Biomedical Sciences degree program. Master of Biomedical Sciences

Program tuition is payable quarterly and determined by the number of credits for which the student is registered.

### Transfer Course Credit

Students may request the transfer of graduate coursework taken at another accredited university to this degree program. However, no more than 9 quarter credit hours can be accepted as transfer credit. Policies for course transfers can be found in the Midwestern University College of Graduate Studies Catalog section titled Advanced Placement/Exemption from Coursework.

### Transferring Between Programs

Transferring between the Master of Biomedical Sciences degree program and the Master of Arts in Biomedical Sciences degree program is prohibited. Master of Biomedical Sciences students who leave the program after their first year will not be granted a Master of Arts degree. Students who complete coursework in one Biomedical Sciences program are ineligible for admission into the other Biomedical Sciences program.

### Transferring from a Program Outside of Midwestern University

The Master of Biomedical Sciences degree program does not accept transfer students from a Master's Program outside of Midwestern University. Students would need to apply for admission to the Master of Biomedical Sciences degree program.

## GRADUATION REQUIREMENTS

To qualify for the Master of Biomedical Sciences (MBS) degree, students must:

1. Follow an approved course of study acceptable to the student's thesis committee, and complete a master's thesis project;
2. Satisfactorily complete the required minimum 72 quarter hours of master's level courses with a 2.75 or higher cumulative grade point average;
3. Pass all required courses;
4. Receive a favorable recommendation from the Student Promotion and Graduation Committee;
5. Be recommended for conferral of the master's degree by the University Faculty Senate;
6. Settle all financial accounts with the University; and
7. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## CURRICULUM

Students must satisfactorily complete the following courses:

### Required Courses: Basic Science

BIOCD	0560, 0570, 0580	Biochemistry I, II, Human Genetics	
MICRD	0583, 0599	Medical Microbiology with Lab, Molecular Immunology	
PHYSD	0550, 0551	Human Physiology I, II	
<b>Total</b>			<b>21</b>
			-
<b>Required Courses: Research and Thesis</b>			
BISCD	0550	Professional Development	1
BISCD	0552	Fundamentals of Research	3
BISCD	0556	Research Design and Methodology	3
BISCD	0557	Principles of Biostatistics	3
BISCD	0558	Literature Review	2
BISCD	0560, 0660, 0661, 0662, 0663	Laboratory Research for Thesis	Each course 1-6
BISCD	0570	Ethics of Research and Experimentation	2
BISCD	0650	Journal Club	3
BISCD	0653, 0654	Seminar in the Biomedical Sciences	Each course 1
BISCD	0665	Thesis Proposal	3
BISCD	0680	Thesis	4
<b>Total</b>			<b>43</b>
Students must complete sufficient elective coursework to satisfy the credit requirement for graduation.			
<b>Elective Options</b>			
ANATD	0945	Human Anatomy	4
ANATD	0955	Human Neuroscience	3
BIOCD	0947	Nutrition in Preventative Medicine	1
BISCD	0913	Nutrition Therapy	1
BISCD	0944	Biomedical Imaging	3
BISCD	0945	Biomarkers in Health and Disease	2

BISCD	0950	Intestinal Bacteria in Health and Disease	2
BISCD	0980	Pathophysiology	4
PHARD	0994, 0995, 0996	Pharmacology I, II, III	Each course 3
PHYSD	0937	Exercise Physiology	3
PSCID	0879	LGBTQI Considerations in the Provision of Healthcare	2
<b>Total</b>			<b>8</b>

### Sample Curriculum

Total Credit Hours Required: 72

#### First Year

Total: 38-44

#### Fall Quarter

BIOCD	0560	Biochemistry I	2.5
BISCD	0550	Professional Development	1
BISCD	0552	Fundamentals of Research	3
BISCD	0556	Research Design and Methodology	3
PHYSD	0550	Human Physiology I	3.5
<b>Total</b>			<b>13</b>

#### Winter Quarter

BIOCD	0570	Biochemistry II	3.5
BISCD	0557	Principles of Biostatistics	3
MICRD	0599	Molecular Immunology	3
PHYSD	0551	Human Physiology II	3.5
		Elective	0-2
<b>Total</b>			<b>13-15</b>

#### Spring Quarter

BIOCD	0580	Human Genetics	1
BISCD	0558	Literature Review	2
BISCD	0560	Laboratory Research for Thesis	3
BISCD	0570	Ethics of Research and Experimentation	2
MICRD	0583	Medical Microbiology with Lab	4
		Elective	0-4
<b>Total</b>			<b>12-16</b>

#### Second Year

Total: 26-42

#### Summer Quarter

BISCD	0650	Journal Club	3
BISCD	0660	Laboratory Research for Thesis	3
BISCD	0665	Thesis Proposal	3
		Elective	0-4

**Total 9-13**

#### Fall Quarter

BISCD	0653	Seminar in the Biomedical Sciences	1
BISCD	0661	Laboratory Research for Thesis	4
		Elective	0-4

**Total 5-9**

#### Winter Quarter

BISCD	0654	Seminar in the Biomedical Sciences	1
BISCD	0662	Laboratory Research for Thesis	4
		Elective	0-4

**Total 5-9**

#### Spring Quarter

BISCD	0663	Laboratory Research for Thesis	3
BISCD	0680	Thesis	4
		Elective	0-4

**Total 7-11**

## REQUIRED COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

### *BIOCD 0560 Biochemistry I*

This course emphasizes principles and concepts of structure-function relationships in major biomolecules and human metabolism. This course includes lectures and workshops which utilize small group discussions focusing on clinical case studies to illustrate principles of clinical biochemistry.  
2.5 credits

### *BIOCD 0570 Biochemistry II*

This course emphasizes concepts in cell and molecular biology and human nutrition. This course includes lectures and workshops which utilize small group discussions focusing on clinical case studies to illustrate principles of clinical biochemistry.  
3.5 credits

### *BIOCD 0580 Human Genetics*

This course is devoted to introducing the foundations of human genetics. Topics include normal transmission of dominant and recessive genetic traits, sex-linked/autosomal-linked inheritance, common genetic defects and diseases, inheritance patterns and probabilities, genetic mapping, common risk factors in inherited/acquired genetic diseases, family counseling, and family planning issues.  
1 credit

### *BISCD 0550 Professional Development*

The purpose of this required pass/fail course is to provide students with skills that are necessary for professional development. The course will feature professionals from different disciplines who will discuss their professions and career paths. The course will also provide students training in interviewing, writing resumes/CVs, and personal statements.  
1 credit

### *BISCD 0552 Fundamentals of Research*

The purpose of this required course is to provide students with basic training in common laboratory techniques. The course will also introduce students to issues related to biosafety, radiation safety, and good practices in research.  
3 credits

### *BISCD 0556 Research Design and Methodology*

This course overviews the uses, values, and limitations of the scientific method. Quantitative, conceptual and model analysis, in-depth research techniques, current research of the literature, research design methods, and theory construction are presented.  
3 credits

### *BISCD 0557 Principles of Biostatistics*

This course teaches students how to apply analytical and statistical techniques to make inferences about research findings. This course covers core principles of biostatistics including basic statistical techniques, introduction to descriptive statistics, statistical inference, significance tests, multiple comparisons tests, correlation and regression analyses. This course also teaches students how to run statistical analyses and create publication-ready figures using GraphPad Prism software.  
3 credits

### *BISCD 0558 Literature Review*

The purpose of this required course is to teach students how to access and search the scientific literature for the purpose of writing a comprehensive literature review related to their thesis topic.  
2 credits

### *BISCD 0560, 0660, 0661, 0662, 0663 Laboratory Research for Thesis*

This required independent laboratory research project is the main objective of the Master of Biomedical Sciences degree program. The project entails original research on a current basic science question. The intent of the project is to develop an appropriate research question, design the proper laboratory methodology to answer the question, and collect the appropriate data.  
Each course 1-6 credits

### *BISCD 0570 Ethics of Research and Experimentation*

This class is intended to give students a broad overview of research ethics and regulation, especially as it relates to human research. Students develop an understanding of the moral basis of research ethics including scientific integrity, research with human subjects, informed consent, vulnerable populations, privacy and confidentiality of records, conflicts of interest, and research on animals.  
2 credits

### *BISCD 0650 Journal Club*

This course will teach students how to build formal presentations and critique findings from published research articles. The instructor will provide lecture materials and interactive computer workshops designed to improve students' PowerPoint skills and public speaking abilities. Students will be required to read current, peer-reviewed primary research articles and summarize the findings into original, visually-oriented presentations. Individual feedback sessions with honest, constructive criticism will help students reach their potential as effective science communicators.  
3 credits

*BISCD 0653, 0654 Seminar in the Biomedical Sciences*

These courses are designed to expose the student to a variety of scientific topics. This is accomplished by attendance at the research seminar series. The student is also expected to present a seminar on their thesis research and a seminar on a Biomedical Sciences topic of their choice.

Each course 1 credit

*BISCD 0655, 0656 Seminar in the Biomedical Sciences for Dual Degree*

These courses are designed to expose the student to a variety of scientific topics. This is accomplished by attendance at the research seminar series. The student is also expected to present a seminar on their thesis research and a seminar on a Biomedical Sciences topic of their choice.

Each course 1 credit

*BISCD 0665 Thesis Proposal*

This course is an independent study course designed to give students the opportunity to perform literature research and develop a thesis proposal necessary for completion of the Master of Biomedical Sciences degree.

3 credits

*BISCD 0680 Thesis*

The research project culminates with the analysis of experimental data, development of appropriate conclusions based on the information gathered, and summarizing the research findings in publication format. The student will also make a public presentation of his/her work to the Midwestern University community. The Thesis Committee approves the proposal, oversees the research project, and approves the final research thesis. Students who do not complete all thesis requirements will be enrolled in thesis continuation for subsequent quarters.

4 credits

*BISCD 0690, 0691, 0692, 0693, 0694, 0695, 0696, 0697, 0698, 0699 Thesis Continuation*

These courses are reserved for students needing additional quarters beyond the spring quarter of Year 2 for completion of the research project and thesis. A fee is assessed with enrollment in these courses.

Each course 0.5 credits

*MICRD 0583 Medical Microbiology with Lab*

This didactic course covers the physiology and molecular mechanisms of medically important microbes and their disease processes. The course includes experiential laboratory sessions that provide a hands-on experience in diagnostic and molecular laboratory procedures as well as experimental design.

4 credits

*MICRD 0599 Molecular Immunology*

This didactic course will introduce students to the fundamental principles of immunology and delve into the molecular mechanisms behind these principles. It will focus on the innate and adaptive immune responses, detailing signal transduction mechanisms responsible for leukocyte activation, epigenetic remodeling involved in leukocyte differentiation, and the molecular biology behind immune responses. Additionally, it will detail recent advances in immunoprophylaxis, and therapies.

3 credits

*PHYSD 0550, 0551 Human Physiology I, II*

Students are introduced to the physiological principles and regulatory processes that underlie the normal function of the human body, and develop an understanding of the physiologic responses to perturbation of homeostasis and of pathophysiologic alterations that occur in disease. Didactic lectures are supplemented with workshops that focus on application of physiological concepts. Topics include the properties of excitable cells and the functions of the neuromuscular, cardiovascular, pulmonary, renal, acid-base, digestive, endocrine and reproductive systems.

Each course 3.5 credits

## ELECTIVE COURSE DESCRIPTIONS

*ANATD 0945 Human Anatomy*

This course provides fundamental knowledge of normal human structure and function. The emerging theme will be the interrelationships between anatomical structures and functional capabilities. During this course, basic components including tissues, muscles, nerves, bones and joints will be covered. The major organ and musculoskeletal systems will be highlighted in both lecture and laboratory formats.

4 credits

*ANATD 0955 Human Neuroscience*

In this course students learn to identify and describe the basic structural components and corresponding functions of the human nervous system. Lectures are given by faculty from the Department of Anatomy.

3 credits

*BIOCD 0947 Nutrition in Preventative Medicine*

This module presents the student with current concepts relating diet to the incidence, etiology, pathogenesis, and prevention of three chronic diseases (cardiovascular disease, cancer, and osteoporosis).

1 credit

*BISCD 0913 Nutrition Therapy*

This course introduces students to medical nutrition therapy which involves the use of nutrition interventions to manage



common diseases in the health care setting. A general overview of nutrition management and intervention approaches will be provided including biochemical and physiological considerations for the diseases presented that include metabolic, gastrointestinal and renal disorders.

1 credit

Prerequisites: BIOCD 0560, 0570 Biochemistry I, II; PHYSD 0550,0551 Human Physiology I, II or with prior course director approval.

#### *BISCD 0944 Biomedical Imaging*

This course covers various forms of clinical and research-grade microscopy. The format will consist of a weekly one hour lecture and a two and a half hour lab exercise (hands-on experience with compound, fluorescence, confocal, and electron microscopes, as well as computer programs for image analysis).

3 credits

#### *BISCD 0945 Biomarkers in Health and Disease*

The purpose of this elective course is to present the concept and importance of biomarkers in health and disease. Generally speaking, a biomarker is anything that can be used as an indicator of a particular disease state or some other physiological state. We will cover the fundamentals of biomarker development, describe research methodologies for identification and detection of biomarkers and review several biomarkers currently used in the clinic along with some promising candidate biomarkers.

2 credits

#### *BISCD 0950 Intestinal Bacteria in Health and Disease*

This course will discuss the role of intestinal bacteria in maintaining health and in the progression of disease states such as obesity, diabetes, and cardiovascular disease. Health benefits of probiotics, prebiotics, and exercise will be addressed with regards to their influence on intestinal bacteria. State-of-the-art techniques currently used to detect and characterize intestinal bacteria will be described. Course includes lectures by leaders in this area of investigation and active class discussion. Emphasis is on application of this information to clinical conditions.

2 credits

#### *BISCD 0956, 0957, 0958, 0959, 0960 Advanced Topics/Journal Club*

The Advanced Topic Series is an opportunity for students to receive individualized or small group instruction on selected advanced topics in any of the basic science disciplines. Format for instruction includes mentoring by individual faculty, case study discussion, review of landmark publications, and class presentations. Students are expected to master major concepts specific to the discipline selected. The

mentoring faculty individualize evaluation of the student.  
1-3 credits

#### *BISCD 0970, 0971, or 0972 Research Elective*

The purpose of this course is to give students hands-on experience in a basic science research laboratory. Students will participate in an ongoing project in the laboratory of a research mentor where they will learn various research techniques and methodologies.

Each course 1-4 credits

#### *BISCD 0980 Pathophysiology*

This course is designed to discuss the etiology, pathogenesis and pathophysiology of selected human disease conditions. A brief review of the normal physiology of each organ system will be discussed prior to presenting prominent disease conditions in each of the following areas: immune regulation; wound healing; hematologic, cardiovascular, respiratory, renal, endocrine, gastrointestinal, neural, and musculoskeletal systems. The information presented in this course will build on previous information obtained in Human Physiology I and II.

4 credits

#### *PHARD 0994, 0995, 0996 Pharmacology I, II, III*

This course sequence introduces students to the general principles of drug action and the therapeutic uses and toxicities of drugs commonly used in humans. A drug's action is considered on an organ-system basis. Specific topics include drugs acting on the: autonomic and central nervous systems, cardiovascular and renal systems, gastrointestinal and genitourinary systems. In addition, discussions on chemotherapy of microbial and parasitic organisms, chemotherapy of neoplastic diseases, drugs acting on blood-forming organs, and hormones are presented. This course also includes discussions of environmental toxic agents and antidotes.

Each course 3 credits

#### *PHYSD 0937 Exercise Physiology*

This course presents core concepts and terminology in exercise physiology. Emphasis is placed on the immediate and long-term physiologic compensatory adjustments to exercise, the role of exercise in promoting optimal health, and the role of exercise as a diagnostic or therapeutic modality in disease states. This is a lecture-based course that utilizes problem-based written assignments to foster application of material.

3 credits

*PSCID 0879 LGBTQI Considerations in the Provision of Healthcare*

This course develops knowledge and skills to facilitate the provision of inclusive, compassionate and holistic patient centered care to members of the Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex (LGBTQI) community. Lecture topics include an introduction to LGBTQI terminology, culture and history, mental health and social service needs, and communication strategies. An emphasis on personal acknowledgement of knowledge/skills deficits may help to prevent health inequities for these populations in the future.

2 credits

# MASTER OF ARTS IN BIOMEDICAL SCIENCES PROGRAM

## MISSION

The Midwestern University Master of Arts in Biomedical Sciences Program provides students with an in-depth education in the biomedical sciences and graduates students who are competitive applicants for admission into professional programs in healthcare.

## DEGREE DESCRIPTION

The Master of Arts in Biomedical Sciences (M.A.) degree is a full-time, three-quarter, graduate level, coursework only program. This program is designed to help students with a bachelor's degree, preferably with a major in the sciences, improve their academic foundation in the biomedical sciences and enhance their credentials for admission into medical school, dental school or other health professional program. All students take a total of 45 quarter hour credits: 41 required credits and 4 elective credits. Required courses include: Biochemistry I & II, Human Genetics, Human Anatomy (with lab), Human Physiology I & II, Pathophysiology, Medical Microbiology, Molecular Immunology, Pharmacology I, II & III, Human Neuroscience and Professional Development. The elective credits, offered in a variety of disciplines, include other biomedical science courses and research-related courses. These electives improve critical thinking and enhance the student's preparation for professional school applications. The maximum allotted time for completion of the program is two years.

## ADMISSIONS

### Admission Requirements

To be considered for admission to the Master of Arts in Biomedical Sciences degree program, applicants must submit the following documented evidence:

1. Completion of a bachelor's degree (B.A. or B.S.) or higher, preferably with a major in the sciences, from a regionally accredited college or university.
2. A minimum cumulative grade point average (GPA) of 2.75 on a scale of 4.00 for all coursework completed.
3. One letter of recommendation from pre-health advisors or committees, science professors, and health professionals.
4. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation.
5. Test scores from one of the following:
  - Graduate Record Examination general test (GRE) using the institutional code for Midwestern University of 1769. Contact Educational Testing Services (ETS) at 866/473-4373 or visit <http://www.ets.org>
  - OR
  - Medical College Admissions Test (MCAT) scores. Contact the MCAT Program Office at 202/828-0690 or visit [www.aamc.org/students/applying/mcat](http://www.aamc.org/students/applying/mcat)
  - OR
  - Dental Admissions Test (DAT) scores. Contact the American Dental Association (ADA) at 312/440-2500 or visit [www.ada.org](http://www.ada.org).
  - OR
  - Pharmacy College Admissions Test (PCAT) scores. Contact Harcourt Assessment, Inc. (also known as Pearson) at 800/622-3231 or visit [www.pcatweb.info](http://www.pcatweb.info)
  - OR
  - Optometry Admissions Test (OAT) scores. Contact Optometry Admission Testing Program at 800/232-2159 or [www.opted.org](http://www.opted.org).
6. Completion of typical health professions coursework including biology, general chemistry, organic chemistry, physics, mathematics, and English. Prospective students are responsible for

- determining the prerequisites for the health professional program and institution of their choice.
7. Completion of the prerequisite courses with grades of C or better (grades of C- are not acceptable).
  8. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
  9. Passage of the Midwestern University criminal background check.

### Prerequisite Courses

Course	Sem. Hrs.	Qtr. Hrs.
Biology with lab	8	12
General Chemistry with lab	8	12
Organic Chemistry with lab	8	12
Physics	4	6
Mathematics	3	4

### Application Process and Deadlines

To be considered for admission into the Master of Arts in Biomedical Sciences Program, applicants must submit their application:

Apply through the Post Baccalaureate Centralized Application Service (PostBacCAS; <https://postbaccas.liaisoncas.com/applicant-ux/#/login>). PostBacCAS allows students to learn about, compare, and apply to a number of post baccalaureate programs through one centralized application.

Requirements for application include:

1. One letter of recommendation (individual or committee letter). The Office of Admissions will accept signed and sealed letters from pre-health advisors or committees, science professors, and health professionals.
2. Copies of transcripts from each college or university attended. Official transcripts must be submitted prior to matriculation from every undergraduate, graduate, or professional school that they have attended or are currently attending. These transcripts must be signed and sealed by the registrar at each institution.
3. Applicants must submit standardized test scores from GRE, MCAT, DAT, PCAT or OAT.
4. The deadline for submitting a completed application is July 15.

### Send application materials to:

Office of Admissions  
Midwestern University  
555 31st Street  
Downers Grove, IL 60515

800/458-6253  
admissil@midwestern.edu

*Please Note:* Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address. All requests for application withdrawal must be made in writing.

### Selection Process

The Master of Arts in Biomedical Sciences Program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The Master of Arts in Biomedical Sciences Program begins in the Fall Quarter. Admission to the Biomedical Sciences Program is considered on a competitive basis for applicants who have achieved the required prerequisites. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee feels would benefit the most from the Program. Selection decisions for the Program are made by the Biomedical Sciences Program Admissions Committee with the approval of the Program Director and the Dean of the College of Graduate Studies until the class is filled. To maximize their competitiveness within the rolling admission process, candidates are advised to submit their completed applications early in the admission cycle.

After receiving completed application packets, the information provided is verified to determine whether all prerequisite coursework has been completed satisfactorily or will be completed prior to potential matriculation and also to verify the cumulative GPAs for applicants for all completed courses. Completed applications are forwarded to the Biomedical Sciences Program Admissions Committee. Applicants will receive notification in writing of admissions decisions.

*Please Note:* Applicants may track the receipt of their application materials and the status of their files on the University's website. Instructions for accessing account information will be sent to the applicant by the Office of Admissions after receipt of the application. Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address or e-mail address.

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close

at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.

2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for

accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

#### **Transfer Course Credit**

Students may request the transfer of graduate coursework taken at another accredited university to this degree program. However, no more than 9 quarter credit hours can be accepted as transfer credit. Policies for course transfers can be found in the Midwestern University College of Graduate Studies Catalog section titled Advanced Placement/Exemption from Coursework.

#### **Transferring Between Programs**

Transferring between the Master of Arts in Biomedical Sciences degree program and the Master of Biomedical Sciences degree program is prohibited. Master of Arts students who do not get accepted into a professional program after the first year cannot continue for a second year to get the Master of Biomedical Sciences degree. Students who complete coursework in one Biomedical Sciences program are ineligible for admission into the other Biomedical Sciences program.

#### **Transferring from a Program Outside of Midwestern University**

The Master of Arts in Biomedical Sciences degree program does not accept transfer students from a Master's Program outside of Midwestern University. Students would need to apply for admission to the Master of Arts in Biomedical Sciences degree program.

## **GRADUATION REQUIREMENTS**

To qualify for the Master of Arts in Biomedical Sciences (MABS) degree, students must:

1. Follow an approved course of study acceptable to the Student Promotion and Graduation Committee;
2. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.75;
3. Satisfactorily complete the required minimum of 45 quarter hour credits for the Master of Arts in Biomedical Sciences degree program;
4. Pass all required courses;
5. Receive a favorable recommendation for Master's degree conferral from the Program faculty to the Student Promotion and Graduation Committee;
6. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate;
7. Settle all financial accounts with the University; and
8. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

## CURRICULUM

Masters of Arts in Biomedical Sciences Program

Total Credit Hours Required: 45

### Fall Quarter

BIOCD	0510	Biochemistry I	2.5
BISCD	0530	Professional Development	1
PHARD	0594	Pharmacology I	3
PHYSD	0520	Human Physiology I	3.5
		Elective	1-4
<b>Total</b>			<b>11-14</b>

### Winter Quarter

ANATD	0503	Human Anatomy	4
BIOCD	0520	Biochemistry II	3.5
MICRD	0520	Molecular Immunology	3
PHARD	0595	Pharmacology II	3
PHYSD	0521	Human Physiology II	3.5
<b>Total</b>			<b>17</b>

### Spring Quarter

ANATD	0520	Human Neuroscience	3
BIOCD	0530	Human Genetics	1
BISCD	0540	Pathophysiology	4
MICRD	0530	Medical Microbiology	3
PHARD	0596	Pharmacology III	3
		Elective	1-4
<b>Total</b>			<b>15-18</b>

### Elective Course Options

BIOCD	0847	Nutrition in Preventative Medicine	1
BISCD	0812	Fundamentals of Research	3
BISCD	0813	Nutrition Therapy	1
BISCD	0820	Ethics of Research and Experimentation	2
BISCD	0826	Research Design and Methodology	3
BISCD	0844	Biomedical Imaging	3
BISCD	0845	Biomarkers in Health and Disease	2

BISCD	0850	Intestinal Bacteria in Health and Disease	2
BISCD	0860, 0861, or 0862	Research Elective	Each course 1-4
PSCID	0879	LGBTQI Considerations in the Provision of Healthcare	2
<b>Total</b>			<b>4</b>

## REQUIRED COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

### *ANATD 0503 Human Anatomy*

This course provides fundamental knowledge of normal human structure and function. The emerging theme will be the interrelationships between anatomical structures and functional capabilities. During this course, basic components including tissues, muscles, nerves, bones and joints will be covered. The major organ and musculoskeletal systems will be highlighted in both lecture and laboratory formats. 4 credits

### *ANATD 0520 Human Neuroscience*

In this course students learn to identify and describe the basic structural components and corresponding functions of the human nervous system. Lectures are given by faculty from the Department of Anatomy. 3 credits

### *BIOCD 0510 Biochemistry I*

This course emphasizes principles and concepts of structure-function relationships in major biomolecules and human metabolism. This course includes lectures and workshops which utilize small group discussions focusing on clinical case studies to illustrate principles of clinical biochemistry. 2.5 credits

### *BIOCD 0520 Biochemistry II*

This course emphasizes concepts in cell and molecular biology and human nutrition. This course includes lectures and workshops which utilize small group discussions focusing on clinical case studies to illustrate principles of clinical biochemistry. 3.5 credits

### *BIOCD 0530 Human Genetics*

This course is devoted to introducing the foundation of human genetics. Topics include normal transmission of dominant and recessive genetic traits, sex-linked/autosomal-

linked inheritance, common genetic defects and diseases, inheritance patterns and probabilities, genetic mapping, common risk factors in inherited/acquired genetic diseases, family counseling, and family planning issues.

1 credit

#### *BISCD 0530 Professional Development*

The purpose of this required pass/fail course is to provide students with skills that are necessary for professional development. The course will feature professionals from different disciplines who will discuss their professions and career paths. The course will also provide students training in interviewing, writing resumes/CVs, and personal statements.

1 credit

#### *BISCD 0540 Pathophysiology*

This course is designed to discuss the etiology, pathogenesis and pathophysiology of selected human disease conditions. A brief review of the normal physiology of each organ system will be discussed prior to presenting prominent disease conditions in each of the following areas: immune regulation; wound healing; hematologic, cardiovascular, respiratory, renal, endocrine, gastrointestinal, neural, and musculoskeletal systems. The information presented in this course will build on previous information obtained in Human Physiology I and II.

4 credits

#### *MICRD 0520 Molecular Immunology*

This didactic course will introduce students to the fundamental principles of immunology and delve into the molecular mechanisms behind these principles. It will focus on the innate and adaptive immune responses, detailing signal transduction mechanisms responsible for leukocyte activation, epigenetic remodeling involved in leukocyte differentiation, and the molecular biology behind immune responses. Additionally, it will detail recent advances in immunoprophylaxis, and therapies.

3 credits

#### *MICRD 0530 Medical Microbiology*

This course introduces the student to the medical microbial world with those concepts that are basic to viruses, prokaryotic and eukaryotic cells. In addition to the infectious diseases as the main topics covered in the lecture, in depth understanding of the molecular biology, genetics and virulence factors of microorganisms will be explained to gain a complete picture of bacterial pathogenesis. MICRD 0583 Medical Microbiology with lab for 4 credits may be taken as an alternative after Program Director's approval.

3 credits

#### *MICRD 0583 Medical Microbiology with Lab*

This didactic course covers the physiology and molecular mechanisms of medically important microbes and their disease processes. The course includes experiential laboratory sessions that provide a hands-on experience in diagnostic, molecular laboratory procedures and experimental design. Requires Program Director's approval to take in place of MICRD 0530.

4 credits

#### *PHARD 0594, 0595, 0596 Pharmacology I, II, III*

This course sequence introduces students to the general principles of drug action and the therapeutic uses and toxicities of drugs commonly used in humans. A drug's action is considered on an organ-system basis. Specific topics include drugs acting on the: autonomic and central nervous systems, cardiovascular and renal systems, gastrointestinal and genitourinary systems. In addition, discussions on chemotherapy of microbial and parasitic organisms, chemotherapy of neoplastic diseases, drugs acting on blood-forming organs, and hormones are presented. This course also includes discussions of environmental toxic agents and antidotes.

Each course 3 credits

#### *PHYSD 0520, 0521 Human Physiology I, II*

Students are introduced to the physiological principles and regulatory processes that underlie the normal function of the human body, and develop an understanding of the physiologic responses to perturbation of homeostasis and of pathophysiologic alterations that occur in disease. Didactic lectures are supplemented with workshops that focus on application of physiological concepts. Topics include the properties of excitable cells and the functions of the neuromuscular, cardiovascular, pulmonary, renal, acid-base, digestive, endocrine and reproductive systems.

Each course 3.5 credits

## ELECTIVE COURSE DESCRIPTIONS

#### *BIOCD 0847 Nutrition in Preventative Medicine*

This module presents the student with current concepts relating diet to the incidence, etiology, pathogenesis, and prevention of three chronic diseases (cardiovascular disease, cancer, and osteoporosis).

1 credit

#### *BISCD 0812 Fundamentals of Research*

The purpose of this course is to provide students with basic training in common laboratory techniques. The course will also introduce students to issues related to biosafety, radiation safety, and good practices in research.

3 credits

*BISCD 0813 Nutrition Therapy*

This course introduces students to medical nutrition therapy which involves the use of nutrition interventions to manage common diseases in the health care setting. A general overview of nutrition management and intervention approaches will be provided including biochemical and physiological considerations for the diseases presented that include metabolic, gastrointestinal and renal disorders.

1 credit

Prerequisites: BIOCD 0560, 0570 Biochemistry I, II; PHYSD 0550, 0551 Human Physiology I, II or with prior course director approval.

*BISCD 0820 Ethics of Research and Experimentation*

This class is intended to give students a broad overview of research ethics and regulation, especially as it relates to human research. Students develop an understanding of the moral basis of research ethics including scientific integrity, research with human subjects, informed consent, vulnerable populations, privacy and confidentiality of records, conflicts of interest, and research on animals.

2 credits

*BISCD 0826 Research Design and Methodology*

This course overviews the uses, values, and limitations of the scientific method. Quantitative, conceptual and model analysis, in-depth research techniques, current research of the literature, research design methods, and theory construction are presented.

3 credits

*BISCD 0844 Biomedical Imaging*

This course covers various forms of clinical and research-grade microscopy. The format will consist of a weekly one hour lecture and a two and a half hour lab workshop (hands-on experience with compound, fluorescence, confocal, and electron microscopes, as well as computer programs for image analysis).

3 credits

Prerequisites: BIOCD 0510 Biochemistry I and BISCD 0812 Fundamentals of Research or prior course director approval.

*BISCD 0845 Biomarkers in Health and Disease*

The purpose of this elective course is to present the concept and importance of biomarkers in health and disease. Generally speaking, a biomarker is anything that can be used as an indicator of a particular disease state or some other physiological state. We will cover the fundamentals of biomarker development, describe research methodologies for identification and detection of biomarkers and review several biomarkers currently used in the clinic along with some promising candidate biomarkers.

2 credits

Prerequisites: BIOCD 0510 Biochemistry I or equivalent.

*BISCD 0850 Intestinal Bacteria in Health and Disease*

This course will discuss the role of intestinal bacteria in maintaining health and in the progression of disease states such as obesity, diabetes, and cardiovascular disease. Health benefits of probiotics, prebiotics, and exercise will be addressed with regards to their influence on intestinal bacteria. State-of-the-art techniques currently used to detect and characterize intestinal bacteria will be described. Course includes lectures by leaders in this area of investigation and active class discussion. Emphasis is on application of this information to clinical conditions.

2 credits

*BISCD 0856 Advanced Topics/Journal Club*

Advanced Topics/Journal Club is an opportunity for students to receive individualized or small group instruction on selected advanced topics in any of the basic science disciplines. Format or instruction includes mentoring by individual faculty, case study discussion, review of landmark publications and class presentations. Students are expected to master major concepts specific to the discipline selected. The mentoring faculty individualize evaluation of the student.

1-3 credits

*BISCD 0860, 0861, or 0862 Research Elective*

The purpose of this course is to give students hands-on experience in a basic science research laboratory. Students will participate in an ongoing project in the laboratory of a research mentor where they will learn various research techniques and methodologies.

Each course 1-4 credits

*PHYSD 0837 Exercise Physiology*

This course presents core concepts and terminology in exercise physiology. Emphasis is placed on the immediate and long-term physiologic compensatory adjustments to exercise, the role of exercise in promoting optimal health, and the role of exercise as a diagnostic or therapeutic modality in disease states. This is a lecture-based course that utilizes problem-based written assignments to foster application of material.

3 credits

*PSCID 0879 LGBTQI Considerations in the Provision of Healthcare*

This course develops knowledge and skills to facilitate the provision of inclusive, compassionate and holistic patient centered care to members of the Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex (LGBTQI) community. Lecture topics include an introduction to LGBTQI terminology, culture and history, mental health and social service needs, and communication strategies. An emphasis on



personal acknowledgement of knowledge/skills deficits may help to prevent health inequities for these populations in the future.

2 credits

## FACULTY

### **Mae Ciancio, Ph.D.**

Loyola University  
Stritch School of Medicine  
Program Coordinator of the Master in Biomedical Sciences Program and Associate Professor

### **Michael J. Fay, Ph.D.**

University of Mississippi  
School of Pharmacy  
Associate Dean, College of Graduate Studies (Downers Grove, IL) and Professor

### **Joshua Z. Gasiorowski, Ph.D.**

Northwestern University  
Integrated Graduate Program  
Associate Professor

### **Kolla Kristjansdottir, Ph.D.**

Duke University  
Duke University Medical Center  
Associate Program Director, Precision Medicine Program and Associate Professor

### **Kathy J. LePard, Ph.D.**

Ohio State University  
Program Director and Professor

### **Kristina Martinez-Guryn, Ph.D., R.D.**

University of North Carolina-Greensboro  
School of Health and Human Sciences  
Assistant Professor

# MASTER OF PUBLIC HEALTH

## MISSION

The Midwestern University Master of Public Health program is an interdisciplinary professional degree in public health. The Global One Health-focused curriculum emphasizes the interconnectedness of health among human, animal, and environmental systems and prepares students to address complex health challenges in a broad range of clinical and public health settings. A student enrolled as a dual-degree candidate in any of Midwestern University's health professional degree programs particularly enhances their medical knowledge, public health skills, and career options upon completion of this program.

## ACCREDITATION

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## DEGREE DESCRIPTION

The Master of Public Health (M.P.H.) program may be completed either as a dual-degree option in conjunction with a health professional degree, such as Doctor of Osteopathic Medicine, Doctor of Veterinary Medicine, Doctor of Optometry, or Doctor of Dental Medicine over a four-year period or as a stand-alone master's degree (beginning in academic year 2022-23) in a full-time, 24-month program. The maximum time allowed for completion of the degree is six years.

Graduates are prepared to directly enter the field as public health professionals or leverage their public health training to expand healthcare career options in clinical, research, community health, and regulatory medicine settings. The predominantly online, 56-quarter-credit Master's degree curriculum is designed to dovetail with Midwestern's healthcare professional programs, allowing dual-degree students to complete most requirements during the didactic years of their professional programs.

The program includes required and elective coursework; a planned, supervised, and evaluated public health practicum; and a culminating project. Core courses are based on the five foundational public health knowledge domains of epidemiology, biostatistics, environmental health science,

social and behavioral science, and health policy and management. Students also complete courses in a Global One Health concentration, with electives focused on each of the One Health domains of human, animal or pathogen, and environment.

The public health practicum, a required component of the M.P.H. degree program, involves participation in approximately three full-time weeks of work at a field practice site, such as a county or state health department or government agency. For dual-degree students, the practicum may be scheduled to coincide with the applicable health professional degree program's rotation schedule, with approval of the respective Dean.

The M.P.H. program also includes a culminating project. This requirement may be completed in conjunction with the student's practicum or as an independent study. Topics may include, but are not limited to: developing or evaluating a public health-related program, conducting a community needs assessment, or conducting traditional hypothesis-driven research of a public health nature. Students will produce a formal written report and deliver an oral presentation of their findings to an appropriate audience as defined by the program.

## ADMISSIONS

### Admission Requirements

To be considered for admission to the M.P.H. degree program, applicants must submit the following documented evidence:

1. Completion of a baccalaureate or higher degree, preferably with a major in the sciences, from a regionally accredited institution. Coursework must include at least one course in college-level introductory biology and one course in college-level algebra or more advanced math.
2. Minimum cumulative grade point average (GPA) of 2.75 on a 4.0 scale.
3. Graduate Record Examination general test (GRE) using the institutional code for Midwestern University of 1769. Applicants holding advanced degrees or who are enrolled in one of Midwestern's

healthcare professional degree programs are exempt from the GRE requirement.

4. Official transcripts of course work from each college or university attended.
5. Two letters of recommendation from individuals able to comment on the applicant's academic or professional experiences.
6. A completed Midwestern University application.
7. Personal Statement.
8. Resume or Curriculum Vita.
9. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
10. Passage of the Midwestern University criminal background check.

### **Application Process and Deadlines**

To be considered for admission to the M.P.H. degree program, applicants must submit their applications online through the Midwestern University direct application. A student accepted to or currently enrolled in any of Midwestern's health professional degree programs may apply to the M.P.H. program as a dual-degree student by submitting an abbreviated online application through the Student Portal and releasing their Midwestern University application package to the M.P.H. program for admissions consideration. No additional application fee is required. A stand-alone degree option for completing the M.P.H. degree will be offered beginning in 2022.

The M.P.H. degree program uses a rolling admissions process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The program begins in the Summer Quarter. After receiving completed application packets, the Midwestern University Office of Admissions verifies the information provided to determine whether all prerequisites have been completed satisfactorily, or they will be completed prior to potential matriculation and also to verify the cumulative GPAs for all completed courses. Admission to the M.P.H. degree program is considered on a competitive basis for applicants submitting completed applications. To maximize their competitiveness within this rolling admission process, candidates are advised to submit their completed applications early in the admission cycle. The deadline for applications is April 1 or the first business day thereafter.

### **Selection Process**

Multiple criteria are used to select the most qualified candidates, including selection of those students the M.P.H. Admissions Committee determines would benefit the most from the program. Selection decisions for the program are made by the M.P.H. Admissions Committee, whose membership includes three faculty members and the M.P.H. Program Director, with the approval of the Dean of the College of Graduate Studies. Applicants are notified either

electronically (i.e., through their admissions portal or by e-mail) or by letter of admissions decisions.

*Please Note:* Applicants may track the receipt of their application materials and the status of their files on the University's website using instructions for accessing account information that will be sent by the Office of Admissions after receipt of their applications. Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Midwestern University  
Office of Admissions  
19555 N. 59th Avenue  
Glendale, AZ 85308  
888/247-9277 or 623/572-3215  
admissaz@midwestern.edu

Midwestern University  
Office of Admissions  
555 31st Street  
Downers Grove, IL 60515  
630/515-6171 or 800/458-6253  
admissil@midwestern.edu

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the college.

Candidates must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) intellectual, conceptual, integrative, and quantitative; and 5) behavioral and social. Technological compensation can be made for some limitation in certain of these areas, but candidates should be able to perform in a reasonably independent manner.

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively in both oral and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.

4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the consistent, prompt completion of all responsibilities and the development of mature, sensitive and effective relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

#### **Transfer Credit from Other Institutions**

The M.P.H. program allows for the transfer of up to 10 quarter-credits from equivalent graduate-level coursework completed at other institutions (within the past 10 years) prior to matriculation at Northwestern University. Generally, transfer credit will only be given to students who satisfactorily completed coursework in another CEPH-accredited M.P.H. or an accredited professional healthcare degree program with a minimum letter grade of "B." Students must submit a letter

of request to the Program Director, who will evaluate the submitted course materials with the appropriate course director to determine whether the course(s) is an appropriate substitute. If the M.P.H. Program Director denies the request for transfer credit, the student may appeal this decision to the CGS Dean. If a course is accepted for credit, the equivalent Northwestern University course and the Transfer Credit notation will be recorded on transcripts along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on transcripts or used in GPA calculations.

#### **Coursework Completed in other Northwestern University Professional Programs**

Dual-degree students enrolled in the M.P.H. program and a health professional degree program at Northwestern University, or recent (within the past 10 years) Northwestern University alumnus of one of these programs may be awarded up to 18 quarter-credit hours towards the M.P.H. degree for approved courses taken in their professional programs. These courses are preapproved by the M.P.H. Program Director with input from the respective health professional degree program Dean, and courses are identified in the course Catalog to indicate eligibility for elective credit in the M.P.H. program. Dual-degree students enroll in the course designated for their primary professional degree program and are awarded credit for both programs upon successful completion of the course. Transcripts for the M.P.H. program reflect the transfer credit from the primary professional degree program. Typically, dual credit in the M.P.H. program is only considered for coursework in which a minimum letter grade of "B" has been earned. A letter grade lower than "B" is not acceptable for dual-credit consideration.

#### **Northwestern College of Osteopathic Medicine Courses Eligible for M.P.H. Elective Credit**

<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>
COREG 1560A, 1570A, 1580A	Interprofessional Healthcare	1.5
FMEDG 1531	Public Health, Jurisprudence, and Medical Ethics	2
CLMDG 1650A, 1650B	Health Outreach through Medicine and Interprofessional Education	0.5
MICRG 1531	Immunology Spring	2.5
ICMDG 1614, 1625, and 1630	Introduction to Clinical Medicine IV, V, and VI	1.5

MICRG 1615, 1625 Microbiology I and II 8

CLMDG 1452 Public Health/Preventive Medicine Journal Club (elective) 1

IPECG 1401A, 1402A Improving Patient Safety I and II (elective, online) 3

IPECG 1404A Leadership in Healthcare Teams (online) 1.5

IPECG 1410A Safe Opioid Practices (online) 1.5

**Arizona College of Optometry Courses Eligible for M.P.H. Elective Credit**

**Course Number Course Name Credit Hours**

BASIG 1511, 1512 Basic Science Integrated Sequence II and III 4

COREG 1560J, 1570J, 1580J Interprofessional Healthcare 1.5

CLMDG 1354J Being a Leader and the Effective Exercise of Leadership 2

OPTOG 1511 Contemporary Issues in Healthcare and Ethics 0.5

OPTOG 1670 Research Design and Biostatistics 1

OPTOG 1672 Capstone Project: Lit Search and Study Design 1

OPTOG 1745 Epidemiology, Public Health, and the Optometric Profession 2

OPTOG 1760 Capstone Project: Data Collection and Analysis 1

OPTOG 1761 Capstone Project: Poster Session 3

OPTOG 1790 Clinical Case Analysis: Evidence-based Medicine 1.5

ONEHG 1301J One Health Grand Rounds (elective) 2

**College of Dental Medicine-Arizona Courses Eligible for M.P.H. Elective Credit**

**Course Number Course Name Credit Hours**

BASIG 1502, 1503 Basic Science Integrated Sequence II and III 4

COREG 1560I, 1570I, 1580I Interprofessional Healthcare 1.5

DENTG 1510, 1520 Preventive Dental Medicine I, II 2.0

DENTG 1523 Healthcare Ethics 0.5

DENTG 1612, 1623, 1634 Dental Community Service I, II, II 1.5

DENTG 1635 Multicultural Healthcare 0.5

DENTG 1852 Clinical Service Learning (2-week rotation) 2.0

IPECG 1401, 1402 Improving Patient Safety I, II (online) 3.0

IPECG 1404 Leadership in Healthcare Teams (online) 1.5

IPECG 1410 Safe Opioid Practices (online) 1.5

IPECG 1420 Antibiotic Stewardship (online) 1.5

**College of Veterinary Medicine Courses Eligible for M.P.H. Elective Credit**

**Course Number Course Name Credit Hours**

COREG 1560L, 1570L, 1580L Interprofessional Healthcare 1.5

MICRG 1522 Veterinary Immunology 3

MICRG 1673 Veterinary Parasitology 3

VMEDG 1510 Understanding Scientific Literature 2

VMEDG 1591, 1592 One Health I, II 5

VMEDG 1593	Public Health, Epidemiology, & Zoonotic Disease	4
VMEDG 1648	Clinical Toxicology	2
VMEDG 1766, 1767	Food Animal Medicine I, II	2.5
VMEDG 1316	Shelter Medicine (elective)	2
VMEDG 1322	Foreign Animal Diseases (elective)	2

**Chicago College of Osteopathic Medicine Courses Eligible for M.P.H. Elective Credit**

Course Number	Course Name	Credit Hours
CORED 1599	Interprofessional Healthcare	1
CLIND 1430	Research Design, Methods, and Approaches	1
CLIND 1500	Healthcare Communications	1
MICRD 1652, 1653	Infectious Disease, Etiologic Agents, and the Immune Response I, II	13
CLIND 1502	Foundations of Osteopathic Clinical Practice	1
CLIND 1407	Career Development (elective)	1
CLIND 1480	Leadership for Physicians (elective)	1

**Chicago College of Optometry Courses Eligible for M.P.H. Elective Credit**

Course Number	Course Name	Credit Hours
CORED 1599K, 1500K, 1699K	Interprofessional Education I; Healthcare Communication; Interprofessional Education II	3
MICRD 1582	Microbiology	1.5
MICRD 1590	Immunology	2
OPTOD 1511	Contemporary Issues in Healthcare and Ethics	1

OPTOD 1680	Capstone Project: Research Design, Biostatistics, and Literature Search	1
OPTOD 1681	Capstone Project: Study Design	1
OPTOD 1745	Epidemiology, Public Health, and the Optometric Profession	2
OPTOD 1778	Capstone Project: Data Collection and Analysis	1
OPTOD 1779	Capstone Project: Dissemination of Results	2
OPTOD 1701	Behavioral Medicine	1
OPTOD 1790	Clinical Case Analysis: Evidence-based Medicine	2

**College of Dental Medicine - Illinois Courses Eligible for M.P.H. Elective Credit**

Course Number	Course Name	Credit Hours
CORED 1599J	Interprofessional Education	1
CORED 1500J	Interprofessional Healthcare Communication	1
DENTD 1547	Healthcare Ethics	0.5
DENTD 1524, 1534	Preventive Dental Medicine I, II	2
DENTD 1546, 1723	Introduction to Human Behavior I, II	2
DENTD 1626, 1636, 1646	Dental Community Service I, II, III	1.5
DENTD 1637	Dental Ethics and Professionalism	0.5
DENTD 1725	Dental Ethics Grand Rounds	0.5
DENTD 1880	Clinical Service Learning	2
DENTD 1825	Practice Management Selectives (Military Forces, Public Health, Prison Systems)	0.5
DENTD 1827	Dental Ethics Capstone	0.5

IBSSD 1522	Blood, Lymphoid Tissue, and Immunology	2
IBSSD 1530	Introduction to Infectious Diseases and Integument, Soft Tissue and Lymphoreticular Systems	3.5

### Faculty Mentor Program for Dual Degree Students

The M.P.H. program assigns a faculty advisor to students in each matriculating cohort to assist with academic concerns. For dual-degree students, faculty mentors or co-mentors are jointly appointed to the College of Graduate Studies (CGS) from their primary degree programs and assist students with the unique challenges of simultaneously managing two programs of study. In addition to faculty mentors, the Program Director, CGS Dean, Associate Deans, and the Dean of Students are also available to assist students. It is the student's responsibility to initiate contact with the faculty mentor for assistance. CGS faculty mentors act as liaisons between the faculty and students. Their responsibilities include:

1. Serving as the student's advisor and academic/professional counselor.
2. Overseeing and monitoring the academic progress and professional growth of the student.
3. Assisting the student in seeking academic and personal counseling services provided by the institution.
4. Serving as an advocate for the student.
5. Counseling the student during their selection of a career path within the profession.

### Satisfactory Academic Progress

A student enrolled as a dual degree student in the M.P.H. program and in one of Midwestern's health professional degree programs is required to pass all required M.P.H. courses with a grade of "C" or higher and maintain a cumulative GPA of 2.50 or higher in the M.P.H. program. Regardless of satisfactory academic progress in the M.P.H. program, the CGS Student Promotion and Graduation Committee may determine that a dual degree student who experiences academic difficulty in the primary degree take a leave of absence from the M.P.H. program until satisfactory academic progress in the primary program is achieved. Separate criteria for achieving satisfactory academic progress in the primary degree program are listed in the catalog under the respective degree program.

## GRADUATION REQUIREMENTS

To qualify for the M.P.H. degree, students must:

1. Complete satisfactorily all courses with a minimum cumulative grade point average of 2.50.
2. Complete satisfactorily the required minimum number of 56 quarter-credits in the curriculum.
3. Receive a favorable recommendation for Master's degree conferral from the CGS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

Master of Public Health degrees earned as part of the dual-degree option are awarded at the commencement for the primary health professional degree program. All other Master of Public Health degrees are awarded at the CGS commencement.

## CURRICULUM

The M.P.H. Program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students. Total quarter credits required for program completion is 56.

### DUAL-DEGREE OPTION

Sample sequencing of courses and course credits. Students may elect to take fewer credit hours during the Summer Quarter. Not all electives are offered every quarter.

Total Credit Hours for Sample Curriculum: 56

Total	32.5
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### Summer Quarter (Year 1)

PUBHG 510	Introduction to Public Health	1
PUBHG 511	Introduction to M.P.H. Project and Practicum	1
PUBHG 514	Health Policy and Management	3
PUBHG 515	Introduction to Environmental & Occupational Health	3
PUBHG 516	Behavioral and Social Aspects of Public Health	3
PUBHG 520	Epidemiology I	2
PUBHG 530	Biostatistics I	2
<b>Total</b>		<b>15</b>

<b>Fall, Winter, and/or Spring Quarters (Year 1)</b>			
	Elective credits transferred from primary health professional degree program	18	
<b>Total</b>		<b>18</b>	
<b>Summer Quarter (Year 2)</b>			
PUBHG 512	Design of M.P.H. Project	0.5	
PUBHG 521	Epidemiology II	2	
PUBHG 531	Biostatistics II	2	
PUBHG 610	Globalization and Impacts to Health	2	
PUBHG 630	One Health Application and Practice	2	
PUBHG 650	Climate Change, Ecosystem Stability and Public Health	2	
	Electives in Global One Health Concentration area	3	
<b>Total</b>		<b>13.5</b>	
<b>Fall, Winter, and/or Spring Quarters (Years 3-4)</b>			
	Electives in Global One Health Concentration area	2	
PUBHG 513	Implementation of M.P.H. Project	0.5	
PUBHG 710	Public Health Practicum	3	
PUBHG 720	Culminating Project	4	
<b>Total</b>		<b>9.5</b>	

## COURSE DESCRIPTIONS

### *PUBHG 510 Introduction to Public Health*

In this course, students examine the field of public health, including the history of public health and preventive medicine, its relationship to healthcare systems, applications of public health, and the legal and ethical issues associated with public health. The objective is to provide students with a variety of educational backgrounds or enrolled in various healthcare programs with a common background and foundation in these topics for the remainder of the program.  
1 credit

### *PUBHG 511 Introduction to M.P.H. Project and Practicum*

In PUBHG 511, guest speakers from various organizations offer potential project and practicum opportunities. The course integrates goal setting, timelines, and curriculum planning for successful completion of the degree program.

1 credit

Prerequisites: Course Director Approval

### *PUBHG 512 Design of M.P.H. Project*

In PUBHG 512, students are guided in developing a preproposal and final proposal for their culminating projects. Students develop a study plan to address their research question and demonstrate compliance with the process of institutional review and approval for student research by submitting all required University forms and supporting documents prior to study implementation.

0.5 credits

Prerequisites: Course Director Approval

### *PUBHG 513 Implementation of M.P.H. Project*

In PUBHG 513, students are guided in preparing abstracts, posters, written reports, or oral presentation slides related to public health practice or research.

0.5 credits

Prerequisites: Course Director Approval

### *PUBHG 514 Health Policy and Management*

The main objective of this course is to provide an overview of healthcare management principles, including strategic and health systems planning, leadership, and resource and information management. Students are introduced to the organization and function of healthcare systems in the US and examine concepts and techniques of health policy development and the role of interest groups in the policy process. Current policy issues with respect to the organization of health services are also discussed.

3 credits

### *PUBHG 515 Introduction to Environmental & Occupational Health*

This course provides students with a broad exposure to basic environmental health topics including: toxicology; indoor and outdoor air quality; food service sanitation; insects and rodents as vectors of disease; environmental noise; energy; drinking water treatment; wastewater treatment; solid waste disposal; injury control; the workplace environment, risk assessment; risk communication; and environmental regulations. Students engage in online discussions covering the specific, general, and global issues associated with these topics.

3 credits

### *PUBHG 516 Behavioral and Social Aspects of Public Health*

In this course, students examine how the behavioral and social sciences can be used to: (1) understand human health-related behavior and (2) guide the application of behavioral theory to modify behavior in order to prevent, reduce, or eliminate public health problems. Students are provided with an overview of behavior-oriented perspectives based on health



promotion/education, psychology, and health communication. The overall objective is that students are able to apply health behavior theory to primary and secondary disease prevention.

3 credits

#### *PUBHG 520 Epidemiology I*

In this introductory course, students learn basic epidemiological principles. Topics focus on the dynamics of disease transmission, descriptive epidemiological measures of disease, and then transitions to instruction on basic principles of study design. The main objective of this course is to provide students with a foundation in epidemiological concepts that prepares them to apply these concepts to study design and data analysis in PUBHG 521, Epidemiology II.

2 credits

#### *PUBHG 521 Epidemiology II*

This course expands upon the basic concepts of epidemiology presented in PUBHG 520 Epidemiology I. Students learn advanced principles of study design and discuss methodological issues including sampling, measurement error, bias, and confounding, and they are introduced to the basics of data analysis. The overall objective of this course is to prepare students to apply epidemiological methods to the breadth of settings in clinical and public health practice.

2 credits

Prerequisites: PUBHG 520 Epidemiology I, PUBHG 530 Biostatistics I

#### *PUBHG 530 Biostatistics I*

In this introductory course, students learn the application of elementary statistical procedures commonly used in biomedical and public health research. Topics include techniques of exploratory data analysis, probability, discrete and continuous statistical distributions, sampling procedures, confidence intervals, hypothesis testing, and sample size determination for experiments and observational studies.

Upon completion, students achieve an elemental understanding of biostatistics and are prepared for the second course in the Biostatistics sequence.

2 credits

#### *PUBHG 531 Biostatistics II*

This course expands the basic concepts presented in PUBHG 530, Biostatistics I. Students learn advanced statistical procedures commonly used in biomedical and public health research, including techniques for the analysis of frequency data, non-parametric methods, simple linear regression and correlation, analysis of variance, multiple regression, logistic regression, and analysis of survival data. Upon completion of this course, students are able to apply statistical tests used in biomedical and public health research and practice.

2 credits

Prerequisites: PUBHG 530 Biostatistics I

#### *PUBHG 710 Public Health Practicum*

Students participate in experiential training in public health within healthcare settings and government-sponsored organizations in the local geographic area and other more distant sites. Students enhance their didactic learning experiences by practical application, and they acquire a broad public health perspective to specific health-related problem solving. Students receive a total of 3 credits for the practicum experience, which may span one or more quarters.

3 credits

Prerequisites: All 500-level required core courses

#### *PUBHG 720 Culminating Project*

To meet graduation requirements, students must demonstrate their knowledge, skill, and practice application competence via a culminating experience that includes the conduct of a culminating project. Students are encouraged to complete the culminating project as part of their practicum experience, but they may also complete this course as an independent study. The products of the culminating project include a project proposal, an oral presentation, and a final written report.

4 credits

Prerequisites: All required core and concentration courses

## CONCENTRATION COURSE DESCRIPTIONS

#### *PUBHG 610 Globalization and Impacts to Health*

In this course students explore the effects of globalization and its social and scientific consequences in public health with the objective of developing systems thinking to address global health concerns. Topics include the interplay between global stressors such as population, war, economics, urbanization, and environment and their effects on the health of populations, the spread of infectious and chronic diseases, nutrition and the food supply, and environmental health.

2 credits

#### *PUBHG 630 One Health Application and Practice*

The overall objective of this course is to teach students to develop strategies to engage stakeholders across multiple disciplines, geographic locations, and cultural perspectives to address public health challenges using One Health approaches. Students learn how the principles of One Health are applicable to current issues that threaten human, animal, and environmental health. Case studies are used to analyze practices and to propose One Health strategies to address challenging public health problems.

2 credits

*PUBHG 650 Climate Change, Ecosystem Stability and Public Health*

This course presents a public health perspective on climate change and ecosystem health. Students explore topics such as how climate change is defined and assessed; its environmental causes and effects; and its effects on populations. Public health initiatives, public education, and policy options to reduce climate change, minimize its effects, and heighten resilience are discussed. The overall objective is for students to articulate how global policies related to energy and agriculture impact human, animal, and ecosystem health.

2 credits

## ELECTIVE COURSE DESCRIPTIONS

### *One Health Domains*

Students complete additional elective courses in a concentration area of Global One Health. Students are required to select at least one course from each of the three One Health domains: Human, Animal/Pathogen, and Environment.

#### **Human Domain**

*PUBHG 810 Epidemiology of Emerging Infectious Diseases*

Students address recently emerging infectious diseases and explore emergence factors and impacts on public health from a One Health perspective. Epidemiologic concepts such as natural reservoirs, modes of transmission, in-apparent versus apparent infections, and herd immunity are discussed. The objective is for students to learn and apply strategies for prevention and control of zoonotic and other emerging infections. Case studies are used to illustrate and apply concepts.

2 credits

*PUBHG 812 Occupational Health and Epidemiology*

In this course students learn to apply epidemiologic methods/tools used in assessing occupational and environmental risk factors. Lectures, case studies, and exercises are integrated with the overall objective to teach various methodologic and analytic approaches to studying the relationship between occupational and environmental exposures and health outcomes.

2 credits

*PUBHG 814 Food Matters: Nutrition in Health Care*

Students examine the role of food in specific health conditions and its function in health promotion and disease prevention. Epidemiological studies on nutrition and health are used to illustrate key points. The overall objective is for students to apply these principles in self-care and interdisciplinary patient care planning.

1 credit

*PUBHG 815 Public Health Policy Development*

In this course students learn to apply concepts and techniques for developing and influencing public health policy on behalf of organizations, the community, and the health services industry. The overall objective is to equip students with the knowledge and skills to design population-based policies and programs.

1 credit

*PUBHG 817 Research Methods in the Health Sciences*

In this course students learn advanced applications of the basic concepts of epidemiology and biostatistics covered in core courses. Using examples from published scientific studies, methodological issues, including sampling, measurement error, bias, confounding, and study design, are discussed and critiqued. Upon completion, students are able to apply effective research methods to investigate health-related questions and critically assess methods used in published research studies.

2 credits

Prerequisites: PUBHG 520 Epidemiology I, PUBHG 521 Epidemiology II, PUBHG 530 Biostatistics I, PUBHG 531 Biostatistics II

#### **Animal/Pathogen Domain**

*PUBHG 830 Food Microbiology and Biotechnology*

In the first part of this course, students explore the range of food-borne pathogens and toxins, the ecology of microorganisms in food, and their implications for food safety. In the second part of the course, students examine biotechnology as a major issue impacting modern food production and food safety. Legislation and social issues related to biotechnology in food are explored. The overall objective is for students to gain an understanding of how changing technology impacts food safety.

2 credits

*PUBHG 832 Antimicrobial Resistance - Science and Policy*

Students examine the complex issue of antimicrobial resistance from both scientific and policy standpoints. The overall objective is to gain an understanding of the contributions of and impacts of antimicrobial resistance on human and veterinary medicine, as well as One Health strategies proposed to address this global problem.

1 credit

*PUBHG 833 Molecular Epidemiology of Infectious Disease*

In this course, students are introduced to the field of molecular epidemiology. Topics discussed include principles and application of molecular techniques, population and evolutionary genetics of pathogenic organisms, and the application of these data to the control of public health diseases in populations. The objective is for students to appreciate the use of molecular approaches to understanding

the etiology, transmission, and control of infectious diseases important to public health.

2 credits

*PUBHG 834 Disease Surveillance Methods and Applications*

Students explore the role of public health surveillance at the local, regional/state, Federal, and global levels.

Considerations in planning, sources, and methods for data collection, analysis, and interpretation, and evaluation of surveillance systems are also covered. Upon completion, students are able to describe appropriate methods and data sources that integrate human, animal, and environmental health information to investigate and control global health problems.

2 credits

*PUBHG 835 U.S. and Global Food Systems*

Students receive an overview of food governance, policy, and regulation in the United States and globally. The roles of public and private sectors at the local, state, national, and international levels are reviewed with the objective of giving students a perspective on the complexity of food policy through legislation, government regulations, and private sector agreements that ultimately impact global health.

Students choose a relevant topic with the objective of critically analyzing the current food regulatory system in the U.S. based on these factors.

2 credits

**Environment Domain**

*PUBHG 850 Public Health Emergency Preparedness and Disaster Response*

Students learn about the National Response Framework and how the US government responds to domestic disasters. The phases of disaster response and the roles and responsibilities of local, state, and Federal agencies are discussed. The objective of the course is for students to understand the factors that enable them, as medical and public health leaders and responders to comprehensively assess these crises and effectively participate in their management and response.

1 credit

*PUBHG 852 Energy Policy and Public Health*

Students explore the connection between US and global energy policies and public health in this course. The historical impact on human health related to fossil fuel energy sources is discussed. Students read relevant policy statements on the topic from the American Public Health Association and other sources, and they discuss holistic approaches to current energy policy with the objective of articulating the impact of these policies on protecting and improving human, animal, and ecosystem health.

1 credit

*PUBHG 853 Environmental Monitoring for Health*

In this survey course, students are introduced to environmental monitoring methods used for health risk assessment or health surveillance procedures. Sampling methods for the evaluation of air, soil, water, chemical, radiation, and physical hazards are discussed. Unique challenges associated with quantifying exposures to environmental hazards, the role of sentinel animals, and environmental quality factors used to detect hazards are also addressed.

2 credits

*PUBHG 854 Principles of Toxicology*

In this course, students focus on general principles of toxicology including but not limited to: toxicity, dose-response, absorption, distribution, metabolism, and excretion, mechanisms of cellular toxicity; variations in toxic responses; and manifestations of toxicity from cellular to organ to organism levels. The overall objective is that students learn to apply these principles to human, animal, and environmental health. Previous exposure to biology and organic or biochemistry is desirable.

2 credits

Prerequisites: Course Director Approval

*PUBHG 858 Principles of Risk Communication*

Students learn key concepts of risk communication theory as well as their practical application to the collection and sharing of information in support of individual and community decision-making about public health issues. The objective is that through practical exercises, students develop elemental risk communication skills to discuss public health issues of concern.

1 credit

*PUBHG 859 Medical Entomology for the Public Health Professional*

In this course students focus on arthropod-borne disease and its impact on global health. Students learn about the biology of important insect and tick vectors that relate to their ability to transmit viral, bacterial, protozoan, and filarial diseases to humans. The overall objective is for students to articulate exposure risks and apply prevention and control strategies.

1 credit

## FACULTY

**Alice Chapman, D.V.M., M.P.H., DACVPM**

North Carolina State University, College of Veterinary  
Medicine  
Program Director  
Assistant Professor

**Lawrence Sands, D.O., M.P.H.**

Midwestern University, Chicago College of Osteopathic  
Medicine  
Associate Professor

**Amy Stein, Ph.D.**

Baylor University  
Manager of BioClinical Statistics and Adjunct Assistant  
Professor

**Felicia Trembath, M.P.H., Ph.D.**

Purdue University  
Assistant Professor

**Andrew Yorgason, D.O., M.P.H.**

Midwestern University, Arizona College of Osteopathic  
Medicine  
Assistant Professor

**Mariah Zeigler, D.V.M., M.P.H., DACVPM**

Virginia Maryland Regional College of Veterinary Medicine  
Assistant Professor

# MASTER OF SCIENCE IN PRECISION MEDICINE

## MISSION

The Midwestern University College of Graduate Studies Master of Science in Precision Medicine is designed as an interdisciplinary professional dual degree in applied genomic sciences that aims to prepare healthcare professional students to utilize genomic information in the prediction, diagnosis, prognosis, prevention, and treatment of disease.

Upon program completion, students in the M.S. in Precision Medicine Program will have the foundational knowledge needed to:

1. Comprehend genomic and other 'omic data, describe how it is created and applied, and demonstrate basic analytical methods;
2. Determine what those data mean in practical terms for a patient's physical and mental health; and,
3. Utilize their knowledge to determine how that data can best be used to meet the medical needs of individual patients or populations.

The Program both complements and expands the mission of Midwestern University to meet the educational needs of the healthcare community by preparing students for the new era of genomic medicine. Students enrolled as dual-degree candidates in Midwestern University's healthcare professional programs will expand their medical knowledge, understand genetic and genomic applications, and enhance their career options upon completion of this Program.

## ACCREDITATION

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## DEGREE DESCRIPTION

The Master of Science (M.S.) in Precision Medicine Program is completed as a dual degree in conjunction with a healthcare professional degree, such as Doctor of Osteopathic Medicine, Doctor of Veterinary Medicine, Doctor of Dental Medicine, or Doctor of Optometry. Students completing other professional degrees at Midwestern University should contact the Precision Medicine Program Director prior to

preparing an application. In some cases, the Post-Graduate Certificate in Precision Medicine may integrate more appropriately with the primary programs that are not listed above. The course work can be completed in as little as two years and is optimally completed within the timeframe of the primary degree program. The maximum time allowed for completion of the degree is six years.

Graduates are prepared to directly enter their chosen healthcare profession with the background to understand and apply genetic or genomic information in the overall care of their patients. The predominantly online, 46-quarter-credit hour Master's degree curriculum is designed to dovetail with select Midwestern healthcare professional programs, which allows dual-degree students to complete most requirements during the didactic years of their programs.

The Master's degree program includes 28 quarter-credit hours of required and elective coursework in Precision Medicine, including an applied genomic Capstone Project. Students must also complete relevant courses in their primary didactic programs, which upon satisfactory completion, will be applied as credit toward their secondary degree in Precision Medicine. Up to 18 hours of dual credit will be awarded from their primary degree programs for a total of 46 quarter-credit hours.

The Master of Science in Precision Medicine Program requires a culminating experience that includes a Genomics Laboratory and Capstone Project whereby students are provided an introduction to the analytical methods needed for a genomic evaluation of an anonymized human genome provided by the course instructors. Veterinary Medicine students may have the option of analyzing a companion animal's genome for this course. The genome sequence will be used to complete the Capstone Project, which will culminate in a written report of the findings and a formal presentation. Upon successful completion of the Capstone Project and other aspects of the Program, students will be awarded the Master of Science in Precision Medicine degree.

## ADMISSIONS

### Admission Requirements

To be considered for admission to the Master of Science in Precision Medicine degree program, applicants must submit the following documented evidence:

1. Acceptance to a Midwestern University primary degree program.
2. Bachelor's degree or higher, preferably in the sciences (minimum cumulative GPA of 2.75).
3. Official transcripts of all undergraduate course work as well as graduate course work if any was completed.
4. A completed Midwestern University application for the Precision Medicine Program.
5. For current Midwestern University students whose primary degree program has already started, a letter of support must be provided from the Dean for their primary degree.
6. Passage of the Midwestern University criminal background check.

### Application Process and Deadlines

To be considered for admission to the M.S. in Precision Medicine degree program, applicants must submit their applications online through the Midwestern University direct application process.

The M.S. in Precision Medicine degree program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The Program begins in the Summer Quarter. Admission to the Program is considered on a competitive basis for applicants submitting completed applications. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee determines would benefit the most from the Program based on their planned programs of study and professional goals.

Due to the nature of the Precision Medicine curriculum, students with prior graduate or undergraduate courses in Biochemistry, Molecular Biology, Genetics, and Genomics will receive preference for admission to the Program.

Selection decisions for the Program are determined by the CGS Precision Medicine Admissions Committee, whose membership includes four faculty members and the Precision Medicine Program Director, with the approval of the Dean of the College of Graduate Studies. To maximize their competitiveness within this rolling admission process, candidates are advised to submit their completed applications early in the admission cycle. The deadline for applications is April 1 or the first business day thereafter.

### Selection Process

After receiving completed application packets, the Midwestern University Office of Admissions verifies the information provided to determine whether all admissions requirements have been completed satisfactorily or will be completed prior to potential matriculation, and to verify the cumulative GPAs for all completed courses. Applicants are notified either electronically (i.e., through their admissions portal or by e-mail) or by letter of admissions decisions. Please note that applicants may track the receipt of their application materials and the status of their files on the University's website using instructions for accessing account information sent by the Office of Admissions after receipt of their applications. Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address, or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Midwestern University Office of Admissions, 19555 N. 59th Avenue Glendale, AZ 85308; [admissaz@midwestern.edu](mailto:admissaz@midwestern.edu); 888/247-9277 or 623/572-3215.

Midwestern University Office of Admissions, 555 31st Street Downers Grove, IL 60515; [admissil@midwestern.edu](mailto:admissil@midwestern.edu); 630/515-6171 or 800/458-6253.

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record, and synthesize large amounts of

information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.

5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidate must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet the Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

#### **Satisfactory Academic Progress**

Students must pass all required M.S. courses with a grade of "C" or higher and maintain a cumulative GPA of 2.50 or higher in the M.S. program. Regardless of satisfactory academic progress in the M.S. program, the CGS Student Promotion and Graduation Committee may determine that a dual degree student who experiences academic difficulty in the primary degree take a leave of absence from the M.S. program until satisfactory academic progress in the primary program is achieved. Separate criteria for achieving satisfactory academic progress in the primary degree program are listed in the catalog under the respective degree program.

## **GRADUATION REQUIREMENTS**

To qualify for the M.S. in Precision Medicine degree, students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.5.
2. Satisfactorily complete the required minimum number of 46 credit hours in the curriculum (including documented dual-degree credits).
3. Receive a favorable recommendation for Master's degree conferral from the CGS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for Master's degree conferral from the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

#### **Graduation**

Master of Science degrees will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements for the degree. Degrees will be awarded at the commencement for the primary degree program if all requirements have been met at that time.

#### **Timeframe for Completion of Curriculum**

The curriculum can be completed in as little as two years. It is expected that most students will complete their dual-degree Master of Science in Precision Medicine within the timeframe of their primary degree program, which is typically 3 to 4 years. Students may exceed this timeframe if necessary, but must satisfactorily complete the full curriculum within six years of the starting date of their Precision Medicine Program in order to be awarded the degree.

#### **Advanced Placement**

The Master of Science in Precision Medicine Program allows the transfer of up to six quarter-credits (applicable only to core program courses) from recent (within the last five years) equivalent graduate-level coursework completed at other institutions prior to matriculation at Midwestern University. Generally, transfer credits would only be given to students who satisfactorily completed coursework with a minimum of a B grade from an accredited graduate degree program. Prior to matriculation, students must submit a letter of request and relevant course materials, including syllabi, to the Program Director. The Program Director will consult with the appropriate course director to evaluate the submitted course materials and determine whether the course is an appropriate substitute for one of the core Precision Medicine Program courses. If the request for transfer credits is denied, students may appeal this decision to the CGS Dean. If a course is accepted for credit, the equivalent Midwestern University course and the Advanced Placement notation will be recorded on the transcript along with the name of the

institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation.

## CURRICULUM

The Midwestern University College of Graduate Studies M.S. in Precision Medicine degree program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Midwestern University and students. Total quarter-credit hours required for Program completion is 46.

A typical curriculum, course credits, and course sequencing is shown below. Not all electives are offered every quarter. PMMSG 501-503 are typically completed in the first summer quarter of the program and PMMSG 601-605 are typically completed in the second Summer quarter. The remaining courses will primarily be completed in the fall through spring quarters.

### Year 1

PMMSG 501	Introduction to Genetics and Genomics	2
PMMSG 502	Genetics of Monogenic and Complex Diseases	3
PMMSG 503	Introduction to Bioinformatics, Statistics, and Data Interpretation	3
PMMSG 504	'Omics and Biomarkers	3
	Electives - See list below	2
<b>Total</b>		<b>13</b>

### Year 2

PMMSG 601	Molecular Pathology of Cancer: Screening, Diagnosis, Prognosis, and Treatment	3
PMMSG 602	Pharmacogenomics	2
PMMSG 603	Microbial Genetics, Infectious Diseases, and the Human Microbiome	3
PMMSG 604	Ethical, Legal, and Social Issues of Precision Medicine	1
PMMSG 605	Counseling and Communication Skills for Precision Medicine	1
PMMSG 606	Introduction to Personal Genomic Analysis, Genomics Laboratory, Part 1	1

PMMSG 607	Capstone Project, Genomics Laboratory Part 2	2
	Electives - See list below	2

**Total** **15**

Students complete four elective courses. Not all electives may be offered in every academic quarter.

### Electives

PMMSG 801	Application of Precision Medicine to Inflammatory and Autoimmune Disease	1
PMMSG 802	Molecular Pathology of Neurological Diseases: Screening, Prognosis, Diagnosis, and Treatment	1
PMMSG 803	Application of Precision Medicine to Cardiovascular Diseases	1
PMMSG 804	Advanced Topics in Pharmacogenomics	1
PMMSG 805	A One Health Approach to Genomics and Precision Medicine	1
PMMSG 806	Epigenomics, Gene Regulatory Networks, and Functional Genomics in Health and Disease	1
PMMSG 807	Genetic Technologies for the Treatment of Disease	1
PMMSG 808	Precision Medicine Journal Club	1
PMMSG 809	Understanding and Interpreting Direct-to-Consumer Genetic Testing	1



## COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

## REQUIRED CORE COURSES

**(Total 24.0 quarter-credit hours: 21 core quarter-credit hours and 3.0 Genomics Laboratory/Capstone quarter-credit hours)**

### *PMMSG 501 Introduction to Genetics and Genomics*

This introductory course presents basic aspects of genetics, genomics, and molecular biology, including DNA variation and mutation. It also covers a range of common analytical techniques for nucleic acids and proteins. Important elements of chromosomal structure are explored as well as concepts related to genetic testing and gene therapy. Upon successful completion of this course, students will have the foundational knowledge necessary for understanding genomic and other 'omics concepts relevant to completing the remaining required core and elective courses.

2 credits

### *PMMSG 502 Genetics of Monogenic and Complex Diseases*

This course explores the genetic underpinnings of both monogenic and complex diseases. Dominant versus recessive autosomal diseases as well as X-linked, mitochondrial, and cytogenetic diseases are covered. Evolutionary and population genetics are discussed, and methods for studying complex diseases are introduced. Students completing this course will demonstrate a working knowledge of the genetics of monogenic and complex diseases, and an understanding of the relevant analytical methods.

3 credits

Prerequisite: PMMSG 501

### *PMMSG 503 Introduction to Bioinformatics, Statistics, and Data Interpretation*

Obtaining patient 'omics data is a first step in precision medicine. Subsequent computational and analytical methods are required to decipher these data. This course focuses on the analysis of 'omics data sets using bioinformatics and statistical tools. Students are introduced to the use of open access software to analyze provided data sets and learn to interpret the results. The objective of this course is to provide students with the basic skills needed to work with and derive valuable information from complex data sets produced by 'omics analyses.

3 credits

Prerequisites: PMMSG 501, 502

### *PMMSG 504 'Omics and Biomarkers*

This course builds on the use of genomics in medicine by extending knowledge into areas that complement genomics, such as transcriptomics, proteomics and metabolomics. Students explore how these 'omics fields can be used in biomarker discovery and health management. Upon successful completion of this course, students will be able to explain broadly what is meant by 'omics analyses, describe the technologies involved, and display a specific comprehension of the source and uses of the various biomarkers in medicine.

3 credits

Prerequisites: PMMSG 501, 502

### *PMMSG 601 Molecular Pathology of Cancer: Screening, Diagnosis, Prognosis, and Treatment*

This course explores genetic and other molecular mechanisms involved in cancer development and progression, including assessment of the genomes and transcriptomes of tumor cells as well as the patient's normal cells. Students examine how this knowledge translates into precision technologies for cancer screening, as well as diagnosing and treating cancer patients. Upon successful completion of this course, students will demonstrate an understanding of the genetic origins and development of cancer, the methods of assessing what is occurring in cancerous cells, and a basic understanding of how knowledge gained from analyses can be used to benefit patients.

3 credits

Prerequisites: PMMSG 501, 502

### *PMMSG 602 Pharmacogenomics*

This course discusses the ways in which genomic information can be used to ensure that patients receive the greatest possible benefit from therapeutics while mitigating risk of adverse events. Students explore how genetic variation may alter drug metabolism, disposition, and action, and they discuss how doses may need to be tailored, or drugs altered to account for certain polymorphic differences. Students successfully completing this course will demonstrate a working knowledge of the interaction between a patient's genetic structure and the safety and efficacy of therapeutic drugs.

2 credits

Prerequisites: PMMSG 501, 502

### *PMMSG 603 Microbial Genetics, Infectious Diseases, and the Human Microbiome*

This course provides information on basic features of microbial genetics that are relevant to health. It covers what is known about the effects of an individual's microbiome on their health, the consequences of dysbiosis, and the effects of the microbiome on patient treatment, including metabolism of therapeutics. Methods for studying and assessing an

individual's microbiome, or microbiome features of various subject groups are discussed. This course also explores the role of 'omics information from both patients and infecting microbes in the identification, targeted treatment, and control of infectious diseases in individuals and on a population basis. After successful completion of this course, students will be able to demonstrate a basic knowledge of health-relevant microbial genetics, will be able to describe the role of the microbiome in health, and will comprehend the usefulness of 'omics technologies in the management of infectious diseases.

3 credits

Prerequisites: PMMSG 501, 502

*PMMSG 604 Ethical, Legal, and Social Issues of Precision Medicine*

This course examines the ethical and legal issues surrounding the use of precision medicine technology, and particularly the potential misuse of genomic information, privacy, ownership of genetic information, open versus informed consent, and accessibility. It also addresses social issues that have developed or may develop in the future as a result of these types of genomic knowledge. Upon successful completion of this course, students will be able to describe existing and potential future ethical, legal, and social issues surrounding the use of precision medicine technologies.

1 credit

Prerequisites: PMMSG 501, 502

*PMMSG 605 Counseling and Communication Skills for Precision Medicine*

This course considers how to effectively communicate genomic or other 'omics information to patients. Students learn how to tailor complex genomic discussions to a lay audience, become aware of how the information provided may be viewed by patients or their families, and consider how to counsel them about this information to enable patient-centric, optimal health decisions. Upon successful completion of this course, students will demonstrate familiarity with both the sensitive issues that arise when using precision medicine technologies and with methods that can be used for effectively communicating that information to patients and their families.

1 credit

Prerequisites: PMMSG 501, 502

## REQUIRED GENOMICS LABORATORY/CAPSTONE COURSE DESCRIPTIONS

(Total 3.0 quarter-credit hours)

*PMMSG 606 Introduction to Personal Genomic Analysis, Genomics Laboratory, Part 1*

This course introduces students to the analytical methods needed for a genetic evaluation of an anonymized human genome provided by the instructors. This genome analysis knowledge is ultimately used to complete a Capstone Project (PMMSG 607). The objective of this course is for students to become familiar with the format in which a sequenced genome is provided and demonstrate the ability to use publicly available software to manipulate that genome sequence and search for the presence of health-related genetic variants.

1 credit

Prerequisites: PMMSG 501, 502, and 503

*PMMSG 607 Capstone Project, Genomics Laboratory Part 2*

In this course, students use the knowledge and skills acquired in previous required courses, particularly in PMMSG 606, to make a health-focused assessment of an anonymized human genome provided to them by the instructors. Students concentrate on identifying gene variants associated directly with genetic diseases or with increased risk for diseases, and evaluating the consequences of those gene variants. This course culminates in a written report of the findings and a formal presentation. The objective of this course is for students to demonstrate competence in basic genome analysis and assessment of genetic risk alleles.

2 credits

Prerequisite: PMMSG 606

## ELECTIVE COURSE DESCRIPTIONS

**Elective Courses (4.0 quarter-credit hours required) Each elective course is 1.0 credit. Not all electives are offered every quarter.**

### *PMMSG 801 Application of Precision Medicine to Inflammatory and Autoimmune Disease*

This course explores genetic/genomic influences on the development of autoimmune diseases and other diseases with inflammatory components. Students discuss the use of biomarker studies for both increasing the accuracy of diagnosis and for identifying proteins and metabolites that may provide insight into the causes of these disorders. Students successfully completing this course will be able to demonstrate an understanding of the genetic underpinnings of inflammatory and autoimmune diseases and be able to explain how biomarker studies can be used to improve patient outcomes.

1 credit

Prerequisites: PMMSG 501, 502

### *PMMSG 802 Molecular Pathology of Neurological Diseases: Screening, Prognosis, Diagnosis, and Treatment*

This course examines the genetic underpinnings of common neurological disorders, neurogenetic disorders, and neurodegenerative diseases. Students study how genomics can be used to identify genes that are directly involved in neurological disorders or that confer significant risk of developing a disorder. Students discuss how that information is used for diagnosis, prognosis, and development of novel therapeutics. Upon successful completion of the course, students will be able to explain the role that gene variants and mutations play in the development of neurological diseases and describe how that information can be used to support effective patient treatment and care.

1 credit

Prerequisites: PMMSG 501, 502

### *PMMSG 803 Application of Precision Medicine to Cardiovascular Diseases*

This course covers polymorphisms related to cardiovascular disease, including genes that contribute to the development of heart disease, atherosclerosis, and stroke. Students review how these genetic risk factors were identified and linked to cardiovascular disease. They also learn about the interplay of lifestyle factors with genetic risk factors in the development of cardiovascular disease. Students completing this course will demonstrate an understanding of gene variants involved in increasing the risk of cardiovascular disease and be able to describe the role that lifestyle choices play in development of cardiovascular disease.

1 credit

Prerequisites: PMMSG 501, 502

### *PMMSG 804 Advanced Topics in Pharmacogenomics*

This advanced topics course provides an in-depth knowledge of the clinical applications of pharmacogenomics. Students deepen their understanding of how genetic differences impact drug therapy. Students view recorded lectures presented by experts on disease-specific topics and also read assigned papers relevant to those topics. Assessment is based on completion of worksheets. Upon successful completion of this course, students will demonstrate a broad understanding of the current and potential clinical applications of pharmacogenomics.

1 credit

Prerequisites: PMMSG 501, 502; PMMSG 602

### *PMMSG 805 A One Health Approach to Genomics and Precision Medicine*

This course focuses on how knowledge of the genomics, health, and environment of one species can be used to effectively develop targeted treatments for other species. It addresses the global interrelatedness of the health of all species and how One Health-based studies can help to develop solutions for human and animal health issues and inform public policy. Students successfully completing this course will be able to describe the uses and practicality of the One Health approach to supporting animal and human health, as well as the health of the environment.

1 credit

Prerequisites: PMMSG 501, 502

### *PMMSG 806 Epigenomics, Gene Regulatory Networks, and Functional Genomics in Health and Disease*

This course examines the importance of gene expression changes on the health of individuals and populations. Topics include how DNA variation can alter gene expression changes, the role of epigenetic changes on gene expression levels, and how these changes contribute to complex disease. Students also examine the potential for future genomic and epigenomic technologies to improve health. Upon successful completion of this course, students will be able to demonstrate knowledge of the role that gene expression changes play in health and disease, as well as being able to describe the factors that influence gene expression.

1 credit

Prerequisites: PMMSG 501, 502

### *PMMSG 807 Genetic Technologies for the Treatment of Disease*

This course explores methods available for manipulation of genomes to treat genetic diseases or to prevent the development of diseases. It addresses the various techniques for conducting gene therapy and editing, and the mechanisms by which they work. Students examine the health risks and ethical issues associated with these technologies. Upon successful completion of this course,

students will demonstrate knowledge of the current technologies used for modifications of the genome, and be able to describe both the benefits and the intended and unintended consequences of these technologies.

1 credit

Prerequisites: PMMSG 501, 502

#### *PMMSG 808 Precision Medicine Journal Club*

This course engages students in surveys and in-depth evaluations of the precision medicine scientific literature. Seminal papers in the development of 'omic and precision medicine technologies, as well as recent publications, are critically reviewed. The objective of this course is to provide students with an understanding of how the various 'omics fields developed and to assist them with learning to evaluate and properly understand scientific literature.

1 credit

Prerequisites: PMMSG 501, 502

#### *PMMSG 809 Understanding and Interpreting Direct-to-Consumer Genetic Testing*

Direct-to-consumer genetic testing is in widespread use for both tracing ancestry and for identification of disease risk alleles. The purpose of this course is to help students understand the various types of tests available and recognize what types of information they provide. Students will learn how to assist their patients in interpreting and applying the results of risk allele testing to achieve better health outcomes. Upon successful completion of this course, students will understand the various formats in which direct-to-consumer genetic testing results are provided, will be able to describe how to appropriately evaluate the information provided, and will be able to help the patient make decisions or find resources that will help them make the best use of the genetic information they receive.

1 credit

Prerequisites: PMMSG 501, 502

## **DUAL CREDIT COURSES FROM PROFESSIONAL PROGRAMS**

**(up to 18 dual credits allowed)**

Students enrolled in a dual-degree program at Midwestern University may be awarded up to 18 quarter-credit hours towards the M.S. degree for approved courses completed satisfactorily in their professional primary degree programs. These courses are preapproved by the Precision Medicine Program Director with input from respective professional program advisors, and courses are identified in the University Catalog as eligible for dual credit in the M.S. in Precision Medicine Program. The following are examples of courses from primary degree programs (e.g., Doctor of Osteopathic Medicine) that are eligible for full or partial dual credit for the purposes of the dual degree M.S. in Precision Medicine.

A credit amount followed by \* indicates the amount of partial dual credit allowed for the course. The awarding of only partial credit is due to the presence of some content within the course that is not closely related to Precision Medicine topics, or which substantially duplicates Precision Medicine coursework.

### **CHICAGO COLLEGE OF OSTEOPATHIC MEDICINE**

BIOCD 1501 Biochemistry I

5.0 credits

BIOCD 1502 Biochemistry II

3.0 credits\*

PHYSD 1501 Physiology I

4.0 credits

PHYSD 1502 Physiology II

5.5 credits

MICRD 1652 Infectious Disease, Etiologic Agents, and the Immune Response I

8.0 credits

MICRD 1653 Infectious Disease, Etiologic Agents, and the Immune Response II

5.0 credits

PATHD 1601 Pathology I

5.0 credits

PATHD 1602 Pathology II

6.0 credits

PATHD 1603 Pathology III

4.5 credits

PHARD 1670 Pharmacology I

5.0 credits

PHARD 1671 Pharmacology II

3.0 credits

PHARD 1672 Pharmacology III

2.0 credits

### **ARIZONA COLLEGE OF OSTEOPATHIC MEDICINE**

BIOCG 1511 Biochemistry I

5.0 credits\*

BIOCG 1522 Biochemistry II

2.0 credits\*

PHYSG 1521 Physiology I

5.0 credits

PHYSG 1532 Physiology II

4.5 credits

MICRG 1531 Immunology

2.5 credits

MICRG 1615 Microbiology I

4.0 credits

MICRG 1625 Microbiology II

4.0 credits

PATHG 1611 Pathology I

5.0 credits

PATHG 1622 Pathology II

5.0 credits

PATHG 1633 Pathology III

5.0 credits

PHARG 1610 Pharmacology I

3.5 credits

PHARG 1620 Pharmacology II

3.5 credits

PHARG 1630 Pharmacology III

3.0 credits

### **COLLEGE OF VETERINARY MEDICINE**

MICRG 1522 Veterinary Immunology

3.0 credits

MICRG 1671 Veterinary Microbiology I

4.0 credits

MICRG 1672 Veterinary Microbiology II

3.0 credits

MICRG 1673 Veterinary Parasitology

3.0 credits

PHARG 1660 Veterinary Pharmacology I

3.0 credits

PHARG 1661 Veterinary Pharmacology II

3.0 credits

PHYSG 1512 Veterinary Physiology I

3.0 credits

PHYSG 1522 Veterinary Physiology II

2.0 credits

PHYSG 1533 Veterinary Physiology III

4.0 credits

VMEDG 1641 Veterinary Pathology I

5.0 credits

VMEDG 1642 Veterinary Pathology II

5.0 credits

VMEDG 1645 Clinical Pathology

4.0 credits

### **ARIZONA COLLEGE OF DENTAL MEDICINE**

BASIG 1501 Basic Science Integrated Sequence I

4.0 credits

BASIG 1502 Basic Science Integrated Sequence II

3.0 credit\*

BASIG 1503 Basic Science Integrated Sequence III

4.5 credits

BASIG 1505 Basic Science Integrated Sequence V

4.5 credits

BASIG 1506 Basic Science Integrated Sequence VI

2.5 credits\*

PHARG 1601 General Pharmacology I

2.0 credits

PHARG 1621 General Pharmacology II

3.0 credits

### **ILLINOIS COLLEGE OF DENTAL MEDICINE**

IBSSD 1520 Molecular, Cellular and Tissue Structure and Function

5.0 credits

IBSSD 1521 Clinical Neuroscience for Dental Students

2.5 credits\*

IBSSD 1522 Blood, Lymphoid Tissue and Immunology

4.0 credits

IBSSD 1530 Essential of Infectious Disease, Integument and Lymphoreticular Systems

3.0 credits

IBSSD 1534 Cardiovascular and Respiratory Systems

3.0 credits\*

IBSSD 1535 Gastrointestinal System

2.0 credits\*

PHARD 1620 General Pharmacology I

2.0 credits

PHARD 1630 General Pharmacology II

3.0 credits

### **ARIZONA COLLEGE OF OPTOMETRY**

BASIG 1510 Basic Science Integrated Sequence I

4.0 credits

BASIG 1511 Basic Science Integrated Sequence II

3.0 credits\*

BASIG 1512 Basic Science Integrated Sequence III

4.5 credits

BASIG 1514 Basic Science Integrated sequence V

4.5 credits

BASIG 1515 Basic Science Integrated Sequence VI

2.5 credits\*

PHARG 1602 General Pharmacology I

2.0 credits

PHARC 1623 General Pharmacology II

3.0 credits

### **ILLINOIS COLLEGE OF OPTOMETRY**

PATHD 1501 Pathology/Histology I

2.0 credits

PHYSD 1530 Human Physiology I

3.5 credits

MICRD 1590 Immunology

2.0 credits

PHYSD 1531 Human Physiology II

3.5 credits

BIOCD 1590 Biochemistry for Optometry

1.5 credits

MICRD 1582 Microbiology

1.5 credits

PATHD 1502 Pathology/Histology II

2.5 credits

PHARD 1641 Pharmacology I

3.0 credits

PHARD 1642 Pharmacology II

2.0 credits

## **FACULTY**

### **Garilyn Jentarra, Ph.D., Program Director**

Arizona State University

Program Director, Precision Medicine Program

Associate Professor

### **Kolla Kristjansdottir, Ph.D.**

Duke University

Associate Program Director, Precision Medicine Program

Associate Professor

### **Hilal Arnouk, M.D., Ph.D.**

The State University of New York at Buffalo

Assistant Professor

### **Nancy Bae, Ph.D.**

University of Maryland at College Park/National Institutes of Health

Associate Professor

### **Bryan Bjork, Ph.D.**

University of Iowa

Associate Professor

### **Thomas Bodenshteyn, Ph.D.**

University of Alabama at Birmingham

Assistant Professor

### **Kimberly Bussey, Ph.D.**

Oregon Health Sciences University

Assistant Professor

### **Annette Gilchrist, Ph.D.**

University of Connecticut Health Sciences Center

Associate Professor

### **Jose Hernandez, Ph.D.**

University of Zaragoza

Professor and Department Chair

### **Samuel Katzif, Ph.D.**

Georgia State University

Associate Professor

### **Lisa Kronstad, Ph.D.**

University of California

Assistant Professor

### **Luigi Strizzi, M.D., Ph.D.**

D'Annunzio University

Associate Professor

**Mark Swanson, Ph.D.**

SUNY, Stony Brook  
Associate Professor

**Martin Szul, Ph.D.**

University of Tennessee  
Instructor

**Tony Tulloh, M.D.**

Medical College of Georgia  
Professor and Department Chair

# POST-GRADUATE CERTIFICATE IN PRECISION MEDICINE

## MISSION

The Midwestern University College of Graduate Studies Post-Graduate Certificate (PGCert) in Precision Medicine Program is designed as an interdisciplinary professional degree in applied genomic sciences that aims to prepare healthcare professional students and practicing healthcare professionals to utilize genomic information in the prediction, diagnosis, prognosis, prevention, and treatment of disease.

Upon completion, students in the Post-Graduate Certificate in Precision Medicine Program will have the foundational knowledge needed to:

1. Comprehend genomic and other 'omic data, describe how it is created and applied, and demonstrate basic analytical methods;
2. Determine what those data mean in practical terms for a patient's physical and mental health, and;
3. Utilize their knowledge to determine how that data can best be used to meet the medical needs of individual patients or populations.

The Program both complements and expands the mission of Midwestern University to meet the educational needs of the healthcare community by preparing students for the new era of applied genomics in medicine. The Post-Graduate Certificate can be pursued as a dual degree (starting June 2021) or stand-alone option (starting June 2022). Dual track Post-Graduate Certificate candidates will complete their degree in conjunction with another Midwestern University healthcare professional program.

The stand-alone Post-Graduate Certificate option may be attractive to applicants who have already successfully completed a graduate healthcare professional program and desire to be further trained in the latest applied genomic sciences. Students enrolled in the dual degree or stand-alone option of the Post-Graduate Certificate in Precision Medicine Program will enhance their medical knowledge,

understand genetic and genomic applications, and expand their career options upon completion of the Program.

## ACCREDITATION

Midwestern University is accredited by The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## DEGREE DESCRIPTION

The PGCert in Precision Medicine Program may be completed either as a dual degree or stand-alone option. Dual degrees are completed in conjunction with healthcare professional degrees such as Doctor of Osteopathic Medicine, Doctor of Veterinary Medicine, Doctor of Dental Medicine, Doctor of Optometry, or Doctor of Pharmacy. Dual degree students completing professional degrees at Midwestern University other than those listed above, including Podiatric Medicine, may apply for this dual degree program with the approval of their Dean. The stand-alone Post-Graduate Certificate option is suitable for students already possessing a graduate healthcare degree and not currently enrolled in other Midwestern University degree programs.

Graduates are prepared to directly enter their chosen healthcare profession with the background to understand and apply genetic or genomic information in the overall care of their patients. This online, 22 quarter-credit hour curriculum (19 credits of required core courses and 3 elective credits) is taught at a graduate level and designed to complement select healthcare professional programs and careers.

The coursework can be completed in as little as two years and, for dual degree students, is optimally completed within the timeframe of the primary program. The maximum time allowed for completion of either the dual degree or stand-alone certificate is six years.

The 22 quarter-credit hour PGCert in Precision Medicine Program includes required and elective coursework. Some dual degree students may desire to transfer from this Program



to the Master of Science in Precision Medicine degree program. Interested students should contact the Precision Medicine Program Director. Additional coursework and completion of the Genomics Laboratory and Capstone Project will be required (see Master of Science in Precision Medicine Program).

## ADMISSIONS

### Admission Requirements

To be considered for admission to the PGCert in Precision Medicine Program as a dual degree or stand-alone option, applicants must submit the following documented evidence:

1. For dual degree students: Bachelor's degree or higher, preferably in the sciences (minimum cumulative GPA of 2.75), and acceptance to a Midwestern University primary degree program.
2. For stand-alone students: Completion of a Midwestern University primary degree program or completion of a graduate healthcare professional degree program from a comparable accredited college or university (minimum cumulative GPA of 2.75).
3. A completed Midwestern University application for the Precision Medicine Program.
4. For current Midwestern University students whose primary degree program has already started, a letter of support must be provided from the Dean for their primary degree.
5. Passage of the Midwestern University criminal background check.

### Application Process and Deadlines

To be considered for admission to the PGCert in Precision Medicine Program, applicants must submit their applications online through the Midwestern University direct application process.

The PGCert in Precision Medicine degree program uses a rolling admission process in which completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. The Program begins in the summer quarter. Admission to the Program is considered on a competitive basis for applicants submitting completed applications. Multiple criteria are used to select the most qualified candidates, including selection of those students the Admissions Committee determines would benefit the most from the Program based on their planned programs of study (if dual degree) and professional goals.

Due to the nature of the Precision Medicine curriculum, students with prior graduate or undergraduate courses in Biochemistry, Molecular Biology, Genetics, and Genomics will receive preference for admission to the Program.

Selection decisions for the Program are determined by the CGS Precision Medicine Admissions Committee, whose membership includes four faculty members and the Precision Medicine Program Director, with the approval of the Dean of the College of Graduate Studies. To maximize their competitiveness within this rolling admission process, candidates are advised to submit their completed applications early in the admission cycle. The deadline for applications is April 1 or the first business day thereafter.

### Selection Process

After receiving completed application packets, the Midwestern University Office of Admissions verifies the information provided to determine whether all admissions requirements have been completed satisfactorily or will be completed prior to potential matriculation and to verify the cumulative GPAs for all completed courses. Applicants are notified either electronically (i.e., through their admissions portal or by e-mail) or by letter of admissions decisions. Please note that applicants may track the receipt of their application materials and the status of their files on the University's website using instructions for accessing account information sent by the Office of Admissions after receipt of their applications. Applicants are responsible for notifying the Office of Admissions of any changes in their telephone number, mailing address, or e-mail address. All requests for application withdrawals must be made in writing to the Office of Admissions:

Midwestern University Office of Admissions, 19555 N. 59th Avenue Glendale, AZ 85308; [admissaz@midwestern.edu](mailto:admissaz@midwestern.edu); 888/247-9277 or 623/572-3215.

Midwestern University Office of Admissions, 555 31st Street Downers Grove, IL 60515; [admissil@midwestern.edu](mailto:admissil@midwestern.edu); 630/515-6171 or 800/458-6253.

### Technical Standards

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College.

Candidates must be able to perform the following abilities and skills:

1. Observation: The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. Communication: The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.

3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control, and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record, and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive, and effective relationships. Candidates must be able to tolerate physically, mentally, and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Satisfactory Academic Progress**

Students must pass all required Certificate courses with a grade of "C" or higher and maintain a cumulative GPA of 2.50 or higher in the Certificate program. For dual degree students, regardless of satisfactory academic progress in the Certificate program, the CGS Student Promotion and Graduation Committee may determine that a dual degree student who experiences academic difficulty in the primary degree take a leave of absence from the Certificate program until satisfactory academic progress in the primary program is achieved. Separate criteria for achieving satisfactory academic progress in the primary degree program are listed in the catalog under the respective degree program.

## **GRADUATION REQUIREMENTS**

To qualify for the PGCert in Precision Medicine degree, students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.5.
2. Satisfactorily complete the required minimum number of 22 credit hours in the curriculum.
3. Receive a favorable recommendation for Post-Graduate Certificate conferral from the CGS Student Promotion and Graduation Committee.
4. Receive a favorable recommendation for Post-Graduate Certificate conferral from the University Faculty Senate.
5. Settle all financial accounts with the University.
6. Complete all graduation clearance requirements as instructed by the Office of the Registrar.

Post-Graduate Certificates will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements for the relevant Post-Graduate Certificate Program.

Post-Graduate Certificates earned through the dual-degree program will be awarded at the commencement for the primary degree program. Post-Graduate Certificates earned through the stand-alone option will be awarded at the CGS commencement.

### **Timeframe for Completion of Curriculum**

The curriculum can be completed in as little as two years. Both dual degree students and students enrolled in the stand-alone Post-Graduate Certificate Program must satisfactorily complete the full curriculum within six years of the starting date of their Precision Medicine Program in order to be awarded the Certificate.

### **Advanced Placement**

The Post-Graduate Certificate in Precision Medicine Program allows the transfer of up to six quarter-credits (applicable only to core program courses) from recent (within

the last five years) equivalent graduate-level coursework completed at other institutions prior to matriculation at Northwestern University. Generally, transfer credits would only be given to students who satisfactorily completed course-work with a minimum of a B grade from an accredited graduate degree program. Prior to matriculation, students must submit a letter of request and relevant course materials, including syllabi, to the Program Director. The Program Director will consult with the appropriate course director to evaluate the submitted course materials and determine whether the course is an appropriate substitute for one of the core Precision Medicine Program courses. If the request for transfer credits is denied, students may appeal this decision to the CGS Dean. If a course is accepted for credit, the equivalent Northwestern University course and the Advanced Placement notation will be recorded on the transcript along with the name of the institution at which the credit was earned. Any earned letter grade will not be included on the transcript or used in the GPA calculation.

## CURRICULUM

The Northwestern University College of Graduate Studies PGCert in Precision Medicine Program reserves the right to alter its curriculum however and whenever it deems appropriate. This Catalog does not establish a contractual relationship between Northwestern University and students. Total quarter-credit hours required for Program completion is 22.

A typical curriculum, course credits, and course sequencing is shown below. Not all electives are offered every quarter.

### Year 1

PMGCG 501	Introduction to Genetics and Genomics	2
PMGCG 502	Genetics of Monogenic and Complex Diseases	3
PMGCG 503	Introduction to Bioinformatics, Statistics, and Data Interpretation	2
PMGCG 504	'Omics and Biomarkers	3
<b>Total</b>		<b>10</b>

### Year 2

PMGCG 601	Molecular Pathology of Cancer: Screening, Diagnosis, Prognosis, and Treatment	3
PMGCG 602	Pharmacogenomics	2
PMGCG 603	Microbial Genetics, Infectious Diseases, and the Human Microbiome	2

PMGCG 604	Ethical, Legal and Social Issues of Precision Medicine	1
PMGCG 605	Counseling and Communication Skills for Precision Medicine	1
	Electives - See list below	3
<b>Total</b>		<b>12</b>

Students complete three elective courses. Not all electives may be offered in every academic quarter.

### Electives

PMGCG 801	Application of Precision Medicine to Inflammatory and Autoimmune Disease	1
PMGCG 802	Molecular Pathology of Neurological Diseases: Screening, Prognosis, Diagnosis, and Treatment	1
PMGCG 803	Application of Precision Medicine to Cardiovascular Diseases	1
PMGCG 804	Advanced Topics in Pharmacogenomics	1
PMGCG 805	A One Health Approach to Genomics and Precision Medicine	1
PMGCG 806	Epigenomics, Gene Regulatory Networks, and Functional Genomics in Health and Disease	1
PMGCG 807	Genetic Technologies for the Treatment of Disease	1
PMGCG 808	Precision Medicine Journal Club	1
PMGCG 809	Understanding and Interpreting Direct-to-Consumer Genetic Testing	1
<b>Total</b>		<b>9</b>

## COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

## REQUIRED CORE COURSES

**(Total 22.0 quarter-credit hours: 19 core quarter-credit hours and 3.0 Elective quarter-credit hours)**

### *PMGCG 501 Introduction to Genetics and Genomics*

This introductory course presents basic aspects of genetics, genomics, and molecular biology, including DNA variation and mutation. It also covers a range of common analytical techniques for nucleic acids and proteins. Important elements of chromosomal structure are explored as well as concepts related to genetic testing and gene therapy. Upon successful completion of this course, students will have the foundational knowledge necessary for understanding genomic and other ‘omics concepts relevant to completing the remaining required core and elective courses.

2.0 credits

### *PMGCG 502 Genetics of Monogenic and Complex Diseases*

This course explores the genetic underpinnings of both monogenic and complex diseases. Dominant versus recessive autosomal diseases as well as X-linked, mitochondrial and cytogenetic diseases are covered. Evolutionary and population genetics are discussed, and methods for studying complex diseases are introduced. Students completing this course will demonstrate a working knowledge of the genetics of monogenic and complex diseases, and an understanding of the relevant analytical methods.

Prerequisite: PMGCG 501

3.0 credits

### *PMGCG 503 Introduction to Bioinformatics, Statistics, and Data Interpretation*

Obtaining patient ‘omics data is a first step in precision medicine. Subsequent computational and analytical methods are required to decipher these data. This course focuses on the analysis of ‘omics data sets using bioinformatics and statistical tools. Students are introduced to the use of open access software to analyze provided data sets and learn to interpret the results. The objective of this course is to provide students with the basic skills needed to work with and derive valuable information from complex data sets produced by ‘omics analyses.

Prerequisites: PMGCG 501, 502

2.0 credits

### *PMGCG 504 ‘Omics and Biomarkers*

This course builds on the use of genomics in medicine by extending knowledge into areas that complement genomics,

such as transcriptomics, proteomics and metabolomics. Students explore how these ‘omics fields can be used in biomarker discovery and health management. Upon successful completion of this course, students will be able to explain broadly what is meant by ‘omics analyses, describe the technologies involved, and display a specific comprehension of the source and uses of the various biomarkers in medicine.

Prerequisites: PMGCG 501, 502

3.0 credits

### *PMGCG 601 Molecular Pathology of Cancer: Screening, Diagnosis, Prognosis, and Treatment*

This course explores genetic and other molecular mechanisms involved in cancer development and progression, including assessment of the genomes and transcriptomes of tumor cells as well as the patient’s normal cells. Students examine how this knowledge translates into precision technologies for cancer screening, as well as diagnosing and treating cancer patients. Upon successful completion of this course, students will demonstrate an understanding of the genetic origins and development of cancer, the methods of assessing what is occurring in cancerous cells, and a basic understanding of how knowledge gained from analyses can be used to benefit patients.

Prerequisites: PMGCG 501, 502

3.0 credits

### *PMGCG 602 Pharmacogenomics*

This course discusses the ways in which genomic information can be used to ensure that patients receive the greatest possible benefit from therapeutics while mitigating risk of adverse events. Students explore how genetic variation may alter drug metabolism, disposition, and action, and they discuss how doses may need to be tailored, or drugs altered to account for certain polymorphic differences. Students successfully completing this course will demonstrate a working knowledge of the interaction between a patient’s genetic structure and the safety and efficacy of therapeutic drugs.

Prerequisites: PMGCG 501, 502

2.0 credits

### *PMGCG 603 Microbial Genetics, Infectious Diseases, and the Human the Microbiome*

This course provides information on basic features of microbial genetics that are relevant to health. It covers what is known about the effects of an individual’s microbiome on their health, the consequences of dysbiosis, and the effects of the microbiome on patient treatment, including metabolism of therapeutics. Methods for studying and assessing an individual’s microbiome, or microbiome features of various subject groups are discussed. This course also explores the

role of ‘omics information from both patients and infecting microbes in the identification, targeted treatment, and control of infectious diseases in individuals and on a population basis. After successful completion of this course, students will be able to demonstrate a basic knowledge of health-relevant microbial genetics, will be able to describe the role of the microbiome in health, and will comprehend the usefulness of ‘omics technologies in the management of infectious diseases.

Prerequisites: PMGCG 501, 502

2.0 credits

#### *PMGCG 604 Ethical, Legal and Social Issues of Precision Medicine*

This course examines the ethical and legal issues surrounding the use of precision medicine technology, and particularly the potential misuse of genomic information, privacy, ownership of genetic information, open versus informed consent, and accessibility. It also addresses social issues that have developed or may develop in the future as a result of these types of genomic knowledge. Upon successful completion of this course, students will be able to describe existing and potential future ethical, legal, and social issues surrounding the use of precision medicine technologies.

Prerequisites: PMGCG 501, 502

1.0 credit

#### *PMGCG 605 Counseling and Communication skills for Genomic/Precision Medicine*

This course considers how to effectively communicate genomic or other ‘omics information to patients. Students learn how to tailor complex genomic discussions to a lay audience, become aware of how the information provided may be viewed by patients or their families, and consider how to counsel them about this information to enable patient-centric, optimal health decisions. Upon successful completion of this course, students will demonstrate familiarity with both the sensitive issues that arise when using precision medicine technologies and with methods that can be used for effectively communicating that information to patients and their families.

Prerequisites: PMGCG 501, 502

1.0 credit

## **ELECTIVE COURSES**

### **Elective Courses (3.0 quarter-credit hours required)**

Each elective course is 1.0 credit. Not all electives are offered every quarter.

#### *PMGCG 801 Application of Precision Medicine to Inflammatory and Autoimmune Disease*

This course explores genetic/genomic influences on the development of autoimmune diseases and other diseases with inflammatory components. Students discuss the use of biomarker studies for both increasing the accuracy of diagnosis and for identifying proteins and metabolites that may provide insight into the causes of these disorders. Students successfully completing this course will be able to demonstrate an understanding of the genetic underpinnings of inflammatory and autoimmune diseases and be able to explain how biomarker studies can be used to improve patient outcomes.

Prerequisites: PMGCG 501, 502

#### *PMGCG 802 Molecular Pathology of Neurological Diseases: Screening, Prognosis, Diagnosis, and Treatment*

This course examines the genetic underpinnings of common neurological disorders, neurogenetic disorders, and neurodegenerative diseases. Students study how genomics can be used to identify genes that are directly involved in neurological disorders or that confer significant risk of developing a disorder. Students discuss how that information is used for diagnosis, prognosis, and development of novel therapeutics. Upon successful completion of the course, students will be able to explain the role that gene variants and mutations play in the development of neurological diseases and describe how that information can be used to support effective patient treatment and care.

Prerequisites: PMGCG 501, 502

#### *PMGCG 803 Application of Precision Medicine to Cardiovascular Diseases*

This course covers polymorphisms related to cardiovascular disease, including genes that contribute to the development of heart disease, atherosclerosis, and stroke. Students review how these genetic risk factors were identified and linked to cardiovascular disease. They also learn about the interplay of lifestyle factors with genetic risk factors in the development of cardiovascular disease. Students completing this course will demonstrate an understanding of gene variants involved in increasing the risk of cardiovascular disease and be able to describe the role that lifestyle choices play in development of cardiovascular disease.

Prerequisites: PMGCG 501, 502

#### *PMGCG 804 Advanced Topics in Pharmacogenomics*

This advanced topics course provides an in-depth knowledge of the clinical applications of pharmacogenomics. Students deepen their understanding of how genetic differences impact drug therapy. Students view recorded lectures presented by experts on disease-specific topics and also read assigned papers relevant to those topics. Assessment is based on completion of worksheets. Upon successful completion of

this course, students will demonstrate a broad understanding of the current and potential clinical applications of pharmacogenomics.

Prerequisites: PMGCG 501, 502; PMGCG 602

*PMGCG 805 A One Health Approach to Genomics and Precision Medicine*

This course focuses on how knowledge of the genomics, health, and environment of one species can be used to effectively develop targeted treatments for other species. It addresses the global interrelatedness of the health of all species and how One Health-based studies can help to develop solutions for human and animal health issues and inform public policy. Students successfully completing this course will be able to describe the uses and practicality of the One Health approach to supporting animal and human health, as well as the health of the environment.

Prerequisites: PMGCG 501, 502

*PMGCG 806 Epigenomics, Gene Regulatory Networks, and Functional Genomics in Health and Disease*

This course examines the importance of gene expression changes on the health of individuals and populations. Topics include how DNA variation can alter gene expression changes, the role of epigenetic changes on gene expression levels, and how these changes contribute to complex disease. Students also examine the potential for future genomic and epigenomic technologies to improve health. Upon successful completion of this course, students will be able to demonstrate knowledge of the role that gene expression changes play in health and disease, as well as being able to describe the factors that influence gene expression.

Prerequisites: PMGCG 501, 502

*PMGCG 807 Genetic Technologies for the Treatment of Disease*

This course explores methods available for manipulation of genomes to treat genetic diseases or to prevent the development of diseases. It addresses the various techniques for conducting gene therapy and editing, and the mechanisms by which they work. Students examine the health risks and ethical issues associated with these technologies. Upon successful completion of this course, students will demonstrate knowledge of the current technologies used for modifications of the genome, and be able to describe both the benefits and the intended and unintended consequences of these technologies.

Prerequisites: PMGCG 501, 502

*PMGCG 808 Precision Medicine Journal Club*

This course engages students in surveys and in-depth evaluations of the precision medicine scientific literature. Seminal papers in the development of 'omic and precision medicine technologies, as well as recent publications, are

critically reviewed. The objective of this course is to provide students with an understanding of how the various 'omics fields developed and to assist them with learning to evaluate and properly understand scientific literature.

Prerequisites: PMGCG 501, 502

*PMGCG 809 Understanding and Interpreting Direct-to-Consumer Genetic Testing*

Direct-to-consumer genetic testing is in widespread use for both tracing ancestry and for identification of disease risk alleles. The purpose of this course is to help students understand the various types of tests available and recognize what types of information they provide. Students will learn how to assist their patients in interpreting and applying the results of risk allele testing to achieve better health outcomes. Upon successful completion of this course, students will understand the various formats in which direct-to-consumer genetic testing results are provided, will be able to describe how to appropriately evaluate the information provided, and will be able to help the patient make decisions or find resources that will help them make the best use of the genetic information they receive.

Prerequisites: PMGCG 501, 502

## FACULTY

**Garilyn Jentarra, Ph.D., Program Director**

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Professor and Department Chair

## CGS GENERAL FACULTY

### ADMINISTRATIVE FACULTY

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### DEPARTMENT OF ANATOMY

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Northwestern University  
Assistant Professor

**Martin Szul, Ph.D.**

University of Tennessee  
Lab Manager & Instructor

**Vaibhav Tiwari, Ph.D.**

Banaras Hindu University, India  
Associate Professor

**DEPARTMENT OF PATHOLOGY**

**ARIZONA**

**Tony Tullo, M.D., Chair**

Medical College of Georgia  
Assistant Professor

**Dana Devine, D.O.**

Kansas City University of Medicine and Biosciences  
College of Osteopathic Medicine  
Associate Professor

**Parveen Ranjan, Ph.D.**

University of Delhi Medical School, New Delhi  
Assistant Professor

**ILLINOIS**

**John N. Kasimos, D.O., M.S., M.S.H.C.E., Chair**

Midwestern University  
Chicago College of Osteopathic Medicine  
Professor

**Hilal Arnouk, M.D., Ph.D.**

The State University of New York at Buffalo  
Assistant Professor

**Louis W. Gierke, D.O.**

Midwestern University  
Chicago College of Osteopathic Medicine  
Professor Emeritus

**Luigi Strizzi, M.D., Ph.D.**

University of Chieti-Pescara, Italy  
Associate Professor

**DEPARTMENT OF PHARMACOLOGY**

**ARIZONA**

**Pamela Potter, Ph.D., Chair**

Dalhousie University  
Professor

**Gerald Call, Ph.D.**

University of Kansas Medical Center  
Professor

**Douglas Jones, Ph.D.**

University of Texas  
Associate Professor

**Laszlo Kerecsen, M.D.**

Medical School of Debrecen  
Professor

**Shaleen Korch, Ph.D.**

University of North Dakota  
Associate Professor

**Jeffrey Norris, D.V.M., Ph.D.**

University of California-Davis  
Assistant Professor

**ILLINOIS**

**Phillip Kopf, Ph.D., Chair**

University of New Mexico  
Associate Professor

**Kirk Dineley, Ph.D.**

University of Pittsburgh  
Professor

**Joshua Edwards, Ph.D.**

Michigan State University  
Professor

**Keith B. Glaser, Ph.D.**

University of California at Santa Barbara  
Adjunct Professor

**Alejandro M. Mayer, Ph.D.**

University of Buenos Aires, Argentina  
Professor

**Marsha Pierce, Ph.D.**

Creighton University  
Assistant Professor

**Walter C. Prozialeck, Ph.D.**

Thomas Jefferson University  
Professor

**Prasanth Puthanveetil, Ph.D.**

University of British Columbia, Canada  
Assistant Professor

**DEPARTMENT OF PHYSIOLOGY**

**ARIZONA**

**Layla Al-Nakkash, Ph.D., Interim Chair**

University of Newcastle-Upon-Tyne  
Professor

**Thomas L. Broderick, Ph.D.**

University of Alberta  
Professor

**Christopher R. Olson, Ph.D.**

Iowa State University  
Assistant Professor

**Michael C. Quinlan, Ph.D.**

Arizona State University  
Associate Professor

**Ann Revill, Ph.D.**

University of Arizona  
Assistant Professor

**Tobias Riede, D.V.M., Ph.D.**

Humboldt University of Berlin, Germany  
Associate Professor

**Johanna Vallejo-Elias, Ph.D.**

University of Missouri  
Professor

**John M. VandenBrooks, Ph.D.**

Yale University  
Associate Professor

**ILLINOIS**

**Kathleen O'Hagan, Ph.D., Chair**

Rutgers, The State University of New Jersey  
Professor

**Mae Ciancio, Ph.D.**

Loyola University, Stritch School of Medicine  
Program Coordinator, Master of Biomedical Sciences  
Program  
Associate Professor

**Kyle Henderson, Ph.D.**

Kansas University Medical Center  
Associate Professor

**Kathy J. LePard, Ph.D.**

The Ohio State University  
Program Director, Biomedical Sciences  
Professor

**Rafael Mejia-Alvarez, M.D., Ph.D.**

Universidad Nacional Autónoma de México School  
of Medicine, Mexico  
Baylor College of Medicine  
Professor

**Paul F. McCulloch, Ph.D.**

University of Saskatchewan, Canada  
Professor

**Maura Porta, Ph.D.**

Loyola University Chicago  
Assistant Professor

**Fred D. Romano, Ph.D.**

Loyola University Chicago  
Dean, College of Health Sciences (Downers Grove, IL)  
Professor

**Jacquelyn M. Smith, Ph.D.**

University of Michigan  
Dean, College of Health Sciences (Glendale, AZ)  
Professor

**Gordon M. Wahler, Ph.D.**

University of Minnesota  
Professor

**BIOMEDICAL SCIENCES PROGRAM**

**ARIZONA**

**Leonard B. Bell, Ph.D., Program Director**

Medical College of Wisconsin  
Professor

**Lori M. Buhlman, Ph.D.**

University of Arizona  
College of Graduate Interdisciplinary Programs  
Associate Professor

**Pedro I. Chavez, Ph.D.**

University of Texas Graduate School  
Professor

**Kimbal E. Cooper, Ph.D.**

University of Illinois  
College of Liberal Arts and Sciences  
Professor Emeritus

**Delrae M. Eckman, Ph.D.**

University of Nevada, Reno School of Medicine  
Associate Professor

**Mitra Esfandiarei, Ph.D.**

University of British Columbia Faculty of Medicine  
Department of Pathology & Laboratory Medicine  
Associate Professor

**Sudhindra R. Gadagkar, Ph.D.**

Dalhousie University  
Associate Professor

**Elizabeth E. Hull, Ph.D.**

Rockefeller University  
Professor

**Nafisa M. Jadavji, Ph.D.**

McGill University  
Assistant Professor

**Nathan W. Johnson, Ph.D.**

Arizona State University  
College of Liberal Arts & Sciences  
Associate Professor

**Carleton B. Jones, Ph.D.**

Washington State University  
College of Pharmacy  
Associate Professor

**Scott D. Soby, Ph.D.**

University of California, Davis  
College of Agricultural and Environmental Science  
Associate Program Director and Professor

**Brian P. Wellensiek, Ph.D.**

University of Arizona College of Medicine  
Associate Professor

**ILLINOIS**

**Kathy J. LePard, Ph.D., Program Director**

The Ohio State University  
Professor

**Mae Ciancio, Ph.D.**

Loyola University, Stritch School of Medicine  
Program Coordinator, Master of Biomedical Sciences  
Program  
Associate Professor

**Joshua Gasiorowski, Ph.D.**

Northwestern University  
Integrated Graduate Program  
Associate Professor

**Kolla Kristjansdottir, Ph.D.**

Duke University  
Duke University Medical Center  
Associate Program Director, Precision Medicine Program  
Associate Professor

**Kristina Martinez-Guryn, Ph.D., R.D.**

University of North Carolina-Greensboro  
School of Health and Human Sciences  
Assistant Professor

**PUBLIC HEALTH PROGRAM**

**Alice Chapman, D.V.M., M.P.H., DACVPM, Program Director**

North Carolina State University, College of Veterinary  
Medicine  
Assistant Professor

**Lawrence Sands, D.O., M.P.H.**

Midwestern University, Chicago College of Osteopathic  
Medicine  
Associate Professor

**Amy Stein, Ph.D.**

Baylor University  
Manager of BioClinical Statistics and Adjunct Assistant  
Professor

**Felicia Trembath, M.P.H., Ph.D.**

Purdue University  
Assistant Professor

**Andrew Yorgason, D.O., M.P.H.**

Midwestern University, Arizona College of Osteopathic  
Medicine  
Assistant Professor

**Mariah Zeigler, D.V.M., M.P.H., DACVPM**

Virginia Maryland Regional College of Veterinary Medicine  
Assistant Professor

**PRECISION MEDICINE PROGRAM**

**Garilyn Jentarra, Ph.D., Program Director**

Arizona State University  
Program Director, Precision Medicine Program  
Associate Professor

**Hilal Arnouk, M.D., Ph.D.**

The State University of New York at Buffalo  
Assistant Professor

**Nancy Bae, Ph.D.**

University of Maryland at College Park/National Institutes of  
Health  
Associate Professor

**Bryan Bjork, Ph.D.**

University of Iowa  
Associate Professor

**Chongwoo Kim, Ph.D.**

Johns Hopkins University  
Associate Professor

**Sudhindra Gadagkar, Ph.D.**

Dalhousie University  
Associate Professor

**Thomas Bodenshteyn, Ph.D.**

University of Alabama at Birmingham  
Assistant Professor

**Annette Gilchrist, Ph.D.**

University of Connecticut Health Sciences Center  
Associate Professor  
Chicago College of Pharmacy  
College of Graduate Studies

**Jose Hernandez, Ph.D.**

University of Zaragoza, Spain  
Professor and Department Chair

**Kolla Kristjansdottir, Ph.D.**

Duke University  
Duke University Medical Center  
Associate Program Director, Precision Medicine Program  
Associate Professor

**Mark Swanson, Ph.D.**

SUNY, Stony Brook  
Associate Professor

# COLLEGE OF DENTAL MEDICINE-ILLINOIS

## MISSION

The Midwestern University College of Dental Medicine-Illinois is dedicated to the education of dentists who will demonstrate excellence in comprehensive oral healthcare and the discovery and dissemination of knowledge.

## VISION

### Vision of ONE

As it takes a village to raise a child, it takes the entire college to develop a competent and confident clinician. Everyone involved with CDMI, working as ONE team, should have that ONE singular purpose of developing competent and confident clinicians in mind as they approach each day.

The following themes guide the CDMI in pursuit of the Vision of ONE.

1. Remembering ONE purpose of developing *competent* and *confident* clinicians
2. Inspiring the desire for growth and development in everyone
3. Modeling the concept of ONE team from Admissions to Graduation
4. Teaching the teachers and leading the leaders
5. Standardizing the CDMI faculty to uniform instruction
6. Empowering students to be partners in their education
7. Empowering staff to be partners in the education of the students
8. Developing leadership skills that bring out the best in the students
9. Utilizing patient centered care to foster empathy by precept, example, and service
10. Leading others to act for the betterment of the larger whole - group, class, school, profession, and community
11. Empowering students to believe in themselves
12. Teaching students the importance of lifelong learning
13. Instilling in students the importance of balance and humility in life
14. Helping students to develop good habits that will last a lifetime
15. Developing a culture of opportunity

16. Developing a culture of optimism
17. Developing a culture of exceptionalism with humility

## ACCREDITATION

The Midwestern University College of Dental Medicine-Illinois is accredited by the Commission on Dental Accreditation (CODA) and has been granted the accreditation status of "approval without reporting requirements." The Commission is a specialized body recognized by the United States Department of Education. The Commission can be contacted at 312/440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/117.aspx>.

Midwestern University is accredited by The Higher Learning Commission (HLC), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

## DEGREE DESCRIPTION

Upon graduation from the College of Dental Medicine-Illinois, the Doctor of Dental Medicine (D.M.D.) degree is granted. The usual length of the course of study is four academic years. The curriculum consists of two years of primarily didactic and preclinical instruction with clinical introductory experiences followed by two years of primarily clinical experiences and rotations including applicable didactic material. Upon graduation with the D.M.D. degree, the graduate is eligible to take licensure examinations to enter dental practice in the United States or Canada or participate in residency training in advanced fields of dentistry.

## ADMISSIONS

The Midwestern University College of Dental Medicine-Illinois considers for admission those students who possess the academic, professional, and personal qualities necessary for development as exemplary dental professionals. To select these students, the College uses a rolling admissions process within a competitive admissions framework.

## Admission Requirements

To be competitive, an applicant should have earned a bachelor's degree from an accredited college or university and possess both a science (biology, chemistry, and physics) and total GPA of 3.00 or more on a 4.00 scale.

### Prerequisite Courses:

Biology with lab	8 Semester/12 Quarter hours
General Chemistry with lab	8 Semester/12 Quarter hours
Organic Chemistry with lab	4 Semester/6 Quarter hours
Anatomy	3 Semester/4 Quarter hours
Microbiology	3 Semester/4 Quarter hours
Physics	8 Semester/12 Quarter hours
Physiology	3 Semester/4 Quarter hours
Biochemistry	3 Semester/4 Quarter hours
English Composition/Technical Writing	6 Semester/9 Quarter hours

In order to be considered for admissions, an applicant must:

1. Complete above prerequisite courses.
2. Submit competitive scores on the Dental Admission Test (DAT).
  - All candidates must submit results from the US DAT.
  - A total DAT score (summative scores less total Science and Academic Average) should be 110 and above to be competitive.
  - Scores in the area of 18 or higher will be expected for the Academic Average, Reading Comprehension, Perceptual Ability and total Science sections
  - The DAT test must have been taken no more than 3 years prior to application.
3. Submit two letters of recommendation.
  - One must be from either a pre dental advisory committee or a science professor
  - The other preferentially should be from either someone with a D.O./M.D. or D.D.S./D.M.D. degree and/or someone who can testify to the integrity and ethical standards of the applicant
  - Letters written by immediate family members will not be accepted
  - All letters of evaluation must be submitted directly from the evaluators. The Office of Admissions will not accept letters submitted by students.
4. Demonstrate a sincere understanding of, and interest in, the humanitarian ethos of health care and particularly dental medicine.

5. Reflect a service orientation through community service or extracurricular activities.
6. Reflect proper motivation for and commitment to health care as demonstrated by previous salaried work, volunteer work, or other life experiences.
7. Possess the oral and written communication skills necessary to interact with patients and colleagues.
8. Agree to abide by Midwestern University Drug-Free Workplace and Substance Abuse Policy.
9. Pass the Midwestern University finger printing and criminal background check.

## Competitive Admissions

Within the competitive admissions framework, the College uses multiple criteria to select the most qualified, diverse group of candidates from an applicant pool that greatly exceeds the number of seats available. Applicants are evaluated on academic coursework, performance on the Dental Admission Test (DAT), their application (AADSAS) essays, letters of evaluation, and interviews. Demonstrated community service through volunteerism or service-oriented employment is preferred.

## Rolling Admissions

Midwestern University College of Dental Medicine-Illinois uses a rolling admissions process. Applications are reviewed and decisions to interview individual candidates are made at regular intervals during the admissions cycle. Interviews are conducted and the selection process of each candidate for College admission is made until the class is filled. Applicants are notified of their selection status as soon as possible after their interview date, but not prior to December 1 of the year preceding matriculation which is the earliest date the U.S. and Canadian dental schools have agreed to extend a position in the class.

## Application Process and Deadlines

### Application Process

To initiate the application process, prospective students must apply directly to ADEA AADSAS at:

655 K Street NW  
Suite 800  
Washington, D.C. 20001  
Phone: 202/289-7201;  
Fax: 202/289-7204

1. Students may apply online at <http://portal.aadsasweb.org>. Students may access an AADSAS application in mid-May of the academic year preceding the year in which they plan to matriculate.
2. After receiving an applicant's processed information from AADSAS, the Office of Admissions creates the applicant file. Concurrently, the office sends a supplemental application to all applicants. The Applicant must complete and return the

supplemental application as soon as possible; additionally, he/she must request two letters of evaluation. All letters of evaluation must be submitted by the evaluators directly to AADSAS or to MWU.

*Please note:* Status of the application can be tracked on the MWU website. Instructions for accessing accounts are available from the Office of Admissions. Please send notification of any changes in your mailing address and e-mail address. All requests for withdrawal an application must be done in writing; contact the Office of Admissions via e-mail at [admissil@midwestern.edu](mailto:admissil@midwestern.edu).

### **Application Deadline**

The official Associated American Dental Schools Application Service (AADSAS) application deadline is January 1st; however, to be competitive within the rolling admissions process, prospective students should submit their AADSAS applications as early as possible after June 1 of the year prior to their desired matriculation. Even though the AADSAS deadline is January 1 of the matriculation year, typically 75 percent of all admissions offers will be made by the end of December of the year prior to matriculation. The Midwestern University College of Dental Medicine-Illinois completion deadline (meaning all necessary parts of the application including DAT test scores and MWU-CDMI supplemental application form are received by the Office of Admissions prior to this date) is March 1 of the expected matriculation year.

### **Interview and Selection Process**

To be considered for interviews, applicants must meet the admissions requirements listed previously. They must also submit all of the materials necessary to complete their files, e.g., AADSAS applications, supplemental MWU applications, DAT scores, and two letters of recommendation written by a pre dental advisory committee, a faculty member, a dentist or physician, and by someone who knows the applicant very well.

After the Office of Admissions receives these materials, applicant files are reviewed to determine whether applicants merit interviews based on established criteria of the Admissions Committee. Applicants who receive invitations to interview must respond within four weeks. The Chair of the Admissions Committee, with the approval of the Dean, may also place a large number of students on an interview "wait list" pending possible interview openings toward the end of the interview cycle.

When applicants accept interviews, they join several other interviewees to meet with members of an interview panel, which is selected from a volunteer group of dental faculty. Team members and students question applicants about their academic and healthcare preparedness for dental school, and they rate the applicants on a standardized evaluation form

relative to each of these variables. At the conclusion of the interviews, team members forward their evaluations for each applicant to the Admissions Committee. The Committee may recommend to accept, to deny, or place applicants on the alternate list. Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status after the interviews, but not before December 1 of the year preceding matriculation, which is the date that all dental schools have agreed would be the first notification date.

The interview process typically begins in the summer prior to matriculation and ends in April or May of the matriculation year.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the CDMI. Candidates must be able to perform the following abilities and skills.

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand, including those on a computer screen or electronic device. Observation necessitates the functional use of vision and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate in English, proficiently and sensitively, in verbal and written form, and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine motor movements, maintain equilibrium and have functional use of the senses of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective relationships. Candidate must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to



function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn are all personal qualities required during the educational process. The candidate must agree to participate in touching/palpating on the skin and being touched/palpated on the skin by individuals regardless of gender in all academic settings, including dental head/neck exams, including intra- and extra-oral examinations. These activities will take place in large and small group settings as directed in the College's curricular requirements.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Reapplication Process**

After receiving either denial or end-of-cycle letters, or letters of dismissal from the College, applicants/students may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of an admissions counselor.

To initiate the reapplication process, applicants must submit their applications to AADSAS. Applications are then processed according to standard application procedures.

### **Transfer Admission**

Midwestern University College of Dental Medicine-Illinois may elect to accept transfer students from other dental schools as long as these students remain in good academic standing and have an acceptable reason(s) for seeking transfer.

To be considered for transfer, students must meet the College's general requirements for admission. Students must also observe the following procedures:

1. All inquiries for transfer to Midwestern University College of Dental Medicine-Illinois must be submitted to the Office of Admissions.
2. Completed applications are returned to the Office of Admissions and must include transcripts from the previous dental school, class rank, a statement of the reason for transfer, a Dean's letter of "Good Academic Standing," and a letter of reference from the Dean of Students.
3. Completed applications are reviewed by the Admission's Committee and forwarded to the Dean.
4. Applications are reviewed by the Dean, who will conduct interviews with transfer applicants.
5. Applicants are notified by the Dean of final transfer admission decisions.

## **GRADUATION REQUIREMENTS**

Students usually complete the Doctor of Dental Medicine (D.M.D.) degree in fourteen consecutive quarters (45 months). To qualify for the D.M.D. degree, students must:

1. Follow an approved course of study leading to the completion of all D.M.D. requirements;
2. Satisfactorily complete all professional courses with a minimum cumulative grade point average of 2.000 and have no course grade below a "C" or "P" (Pass);
3. Successfully complete all CDMI competencies;
4. Challenge the Integrated National Board Dental Examination (NBDE);
5. Receive a favorable recommendation for conferral of the D.M.D. degree from the Student Academic Promotions Committee, Clinical and the Dean of CDMI;
6. Be recommended for conferral of the D.M.D. degree by the University Faculty Senate;
7. Settle all financial accounts with the University; and
8. Complete all graduation clearance requirements as instructed by the CDMI and University.

## **LICENSURE REQUIREMENTS**

Graduates of accredited U.S. Dental Schools are eligible to challenge certain licensure examinations and thereby obtain the right to practice dentistry ("licensure") in all 50 states of the United States, as well as many foreign countries. To obtain licensure, qualified candidates must meet the requirements established by individual states. Typically, states grant licensure in one of two ways:

1. The state accepts a certificate issued by the National Board of Dental Examiners (NBDE) and a certificate issued by a regional board of dental examiners (e.g. CRDTS, CDCA, SRTA, WREB)
2. Certain states honor formal or informal reciprocity agreements with other state(s) and, in some cases,

issue a license by credentialing the certificate from another state.

It is the ultimate responsibility of the individual dental graduate / candidate to become fully aware of the many rules, regulations and restrictions related to licensure across the United States. Midwestern University and the College of Dental Medicine-Illinois cannot and will not be responsible for the many regulations and frequent changes that occur in the licensure environment.

For further information concerning licensure, please contact the American Dental Association or the specific state's licensing board.

Midwestern University's College of Dental Medicine-Illinois is designed to meet the educational requirements to become licensed to practice medicine in the following states and US districts and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district or territory in which they intend to pursue employment. *Special note:* licensure in New York and Delaware also requires completion of a PGY1 residency.

## CURRICULUM

The Midwestern University College of Dental Medicine-Illinois reserves the right to alter its curriculum whenever it deems appropriate for the essential professional preparation of its students.

### Total Quarter Credits in the Professional Program: 251.5

#### First Professional Year:

Total Quarter Hours Required: 54

#### Fall Quarter

CORED	1599J	Interprofessional Education I	1
IBSSD	1520	Molecular, Cellular and Tissue Structure and Function	5
IBSSD	1521	Clinical Neuroscience for Dental Students	3.5

IBSSD	1522	Blood, Lymphoid Tissue and Immunology	4
DENTD	1522	Oral Health Sciences I	3
DENTD	1522L	Oral Health Sciences I Lab	2
DENTD	1524	Preventive Dental Medicine I	1
DENTD	1525	Personal Finance	0.5
DENTD	1529	Preclinical Professionalism I	0.5
<b>Total</b>			<b>20.5</b>

#### Winter Quarter

CORED	1500J	Interprofessional Healthcare Communication	1
IBSSD	1530	Essentials of Infectious Disease, Integument and Lymphoreticular Systems	3
IBSSD	1534	Cardiovascular and Respiratory Systems	4.5
IBSSD	1535	Gastrointestinal System	3.5
DENTD	1532	Oral Health Sciences II	2.5
DENTD	1532L	Oral Health Sciences II Lab	2
DENTD	1534	Preventive Dental Medicine II	1
DENTD	1539	Preclinical Professionalism II	0.5
<b>Total</b>			<b>18</b>

#### Spring Quarter

IBSSD	1540	Endocrinology/Urinary and Reproductive Systems, Growth and Aging	4.5
IBSSD	1541	Gross Anatomy for Dental Students	4.5
DENTD	1542	Oral Health Sciences III	2.5
DENTD	1542L	Oral Health Sciences III Lab	2
DENTD	1546	Introduction to Human Behavior I	1
DENTD	1547	Healthcare Ethics	0.5
DENTD	1549	Preclinical Professionalism III	0.5
<b>Total</b>			<b>15.5</b>

#### Second Professional Year:

Total Quarter Credit Hours Required: 66

#### Fall Quarter

PHARD	1620	General Pharmacology I	2
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DENTD 1622	Oral Health Sciences IV	10.5
DENTD 1622L	Oral Health Sciences IV Lab	7
DENTD 1624	Clinical Case Studies I	1
DENTD 1626	Dental Community Service I	0.5
DENTD 1629	Preclinical Professionalism IV	0.5
<b>Total</b>		<b>21.5</b>

**Winter Quarter**

PHARD 1630	General Pharmacology II	3
DENTD 1632	Oral Health Sciences V	10.5
DENTD 1632L	Oral Health Sciences V Lab	7
DENTD 1634	Clinical Case Studies II	1
DENTD 1636	Dental Community Service II	0.5
DENTD 1637	Dental Ethics and Professionalism	0.5
DENTD 1639	Preclinical Professionalism V	0.5
<b>Total</b>		<b>23</b>

**Spring Quarter**

DENTD 1638	Medical Emergencies	1
DENTD 1642	Oral Health Sciences VI	9.5
DENTD 1642L	Oral Health Sciences VI Lab	8
DENTD 1644	Clinical Case Studies III	1
DENTD 1646	Dental Community Service III	0.5
DENTD 1647	Anesthesia I	1
DENTD 1649	Preclinical Professionalism VI	0.5
<b>Total</b>		<b>21.5</b>

**Third Professional Year:**

Total Quarter Credit Hours Required: 70

**Summer Quarter**

DENTD 1710	Oral Health Sciences 3.1A	12
DENTD 1712	Clinical Professionalism Introduction	1.5
DENTD 1713	Anesthesia II	1
DENTD 1714	Surgical Periodontics General Practice	1
DENTD 1716	Clinical Conference I	1
DENTD 1717	Advanced Imaging	1
<b>Total</b>		<b>17.5</b>

**Fall Quarter**

DENTD 1720	Oral Health Sciences 3.2A	12
DENTD 1722	Clinical Professionalism I	1.5
DENTD 1723	Introduction to Human Behavior II	1
DENTD 1724	Clinical Reviews	2
DENTD 1725	Dental Ethics Grand Rounds	0.5
DENTD 1726	Clinical Conference II	0.5
<b>Total</b>		<b>17.5</b>

**Winter Quarter**

DENTD 1730	Oral Health Sciences 3.3A	12
DENTD 1732	Clinical Professionalism II	1.5
DENTD 1733	Implantology	1
DENTD 1734	Clinical Pharmacology I	1
DENTD 1735	Practice Management I	1
DENTD 1736	Clinical Topics	1
<b>Total</b>		<b>17.5</b>

**Spring Quarter**

DENTD 1740	Oral Health Sciences 3.4A	12
DENTD 1742	Clinical Professionalism III	1.5
DENTD 1743	Occlusion	1
DENTD 1744	Oral Pathology I	1
DENTD 1745	Practice Management II	1
DENTD 1746	Special Needs	1
<b>Total</b>		<b>17.5</b>

**Fourth Professional Year:**

**Total Quarter Credit Hours Required: 61.5**

**Clinical Block**

DENTD 1880	Clinical Service Learning	Credits: 2
<b>Total</b>		<b>2</b>

<b>Summer Quarter</b>			
DENTD	1810	Oral Health Sciences 4.1A	11.5
DENTD	1812	Clinical Professionalism IV	1.5
DENTD	1814	Oral Pathology II	1
DENTD	1815	Practice Management III	1
<b>Total</b>			<b>15</b>
<b>Fall Quarter</b>			
DENTD	1820	Oral Health Sciences 4.2A	11.5
DENTD	1822	Clinical Professionalism V	1.5
DENTD	1824	Clinical Pharmacology II	1
DENTD	1825	Practice Management Selectives	0.5
DENTD	1826	Clinical Conference III	0.5
DENTD	1827	Dental Ethics Capstone	0.5
DENTD	1828	Advanced Topics I	1
<b>Total</b>			<b>16.5</b>
<b>Winter Quarter</b>			
DENTD	1830	Oral Health Sciences 4.3A	11.5
DENTD	1832	Clinical Professionalism VI	1.5
DENTD	1834	Advanced Practice Management	1
DENTD	1838	Advanced Topics II	1
<b>Total</b>			<b>15</b>
<b>Spring Quarter</b>			
DENTD	1840	Oral Health Sciences 4.4A	11.5
DENTD	1842	Clinical Professionalism VII	1.5
<b>Total</b>			<b>13</b>

## COURSE DESCRIPTIONS

### One Health/Interprofessional Education

#### *CORED 1599 Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease.  
1 credit

#### *CORED 1500J Interprofessional Healthcare Communication*

This course is taught by behavioral scientists and introduces students to the fundamental principles for the effective communication with patients, families, and significant others of the patient. Using material gleaned from the empirical and clinical domains of behavioral medicine, the course focuses on patient-centered approaches for promoting, improving, and maintaining dialogue with patients. Effective communication has been shown to be central to patient satisfaction, professional satisfaction, patient adherence to treatment plans, and positive outcomes for the patient.  
1 credit

### Integrated Basic Sciences

#### *IBSSD 1520 Molecular, Cellular and Tissue Structure and Function*

This course spans four modules that cover cell and tissue structure, cell signaling and metabolism, molecular biology and inheritance, and nutrition and cancer. Module 1: Cell and Tissue Structure. The disciplines of Biochemistry and Histology cover general cell structure and function. Topics include cell structure, muscle, epithelium and connective tissue, amino acid and protein structure, enzyme regulation and hemoglobin as well as a virtual histology laboratory. Module 2: Cell Signaling and Metabolism. Topics include second messenger, catalytic and steroid signaling, regulation of membrane transport, intermediary metabolism and bioenergetics, carbohydrate, protein and lipid metabolism and the biochemical foundations of diabetes mellitus. Module 3: Molecular Biology and Inheritance. Topics include the human genome, DNA replication, repair and mutations, transcription, translation and trafficking, genetic risk, autosomal dominant, recessive, sex-linked, mitochondrial and multifactorial inheritance as well as chromosomal abnormalities, genetic screening, diagnosis and gene therapy. Module 4: Nutrition and Cancer. Topics include macronutrients, vitamins, alcohol, iron and mineral metabolism, malnutrition and obesity as well as apoptosis, regulation of the cell cycle, histopathology of cancer, the molecular basis of cancer, tumor promotion and cancer metabolism.  
5 credits

#### *IBSSD 1521 Clinical Neuroscience for Dental Students*

This course presents an interdisciplinary approach to clinical neuroscience with an emphasis on craniofacial sensory innervation. The disciplines of anatomy, physiology, microbiology and pathology cover the gross anatomy and function of the central nervous system (CNS). Topics include histology and structure of the nervous system, physiology of nerve and neuromuscular transmission, somatosensory function, special senses, CNS infectious disease, the motor

system, higher cortical function and relevant CNS pathology.  
3.5 credits

*IBSSD 1522 Blood, Lymphoid Tissue and Immunology*

This course spans three modules to provide an overview of blood, lymphoid tissue, immunology and white blood cell disorders. Module 1: Biochemistry and Histology of Blood and Lymphoid Tissue. The disciplines of biochemistry, pathology, and anatomy present the topics of hemostasis, anemia, hematopoiesis, and the histology and anatomy of lymphoid organs. Module 2: Innate and Adaptive Immune System. The microbiology and immunology department presents topics including antibodies, complement, phagocytosis, inflammation, T cells, B cells, and integrated immune responses to pathogens. Module 3: White Blood Cell disorders and Clinical Immunology. The disciplines of pathology and immunology present the topics of vaccines, wound healing, cancer immunology, transplant immunology, hypersensitivities, immune deficiencies, autoimmunity, white blood cell disorders and neoplastic blood disorders.

4 credits

*IBSSD 1530 Essentials of Infectious Disease, Integument and Lymphoreticular Systems*

This course spans three modules that present principles of infectious disease, followed by a discussion of skin and blood disorders. Module 1: Introduction to Infectious Disease. Fundamentals of infectious disease and epidemiology are covered in this module. Topics include taxonomy, structure, identification and virulence determinants of infectious agents, and principles of infection control. Module 2: Integument. The disciplines of anatomy, microbiology and pathology cover normal skin structure and function, and mechanisms of the clinical course of relevant integument disorders and diseases. Module 3: Lymphoreticular system. The disciplines of microbiology and pathology cover topics that include bacterial, fungal, viral, and other blood-borne pathogens, in addition to medically relevant arthropods and the pathologic basis of various neoplastic diseases.

3 credits

*IBSSD 1534 Cardiovascular and Respiratory Systems*

This course presents an interdisciplinary approach to the cardiovascular system and respiratory systems over four modules. The disciplines of gross anatomy, histology, embryology, physiology, microbiology and pathology cover the development, structure and function of the cardiovascular and respiratory systems. Cardiovascular topics include: gross anatomy, histology and embryology of the cardiovascular system, cardiac and smooth muscle, cardiac function, systemic and microcirculatory hemodynamics, control of blood pressure, infective endocarditis and cardiac disease. Respiratory topics include: gross anatomy, and histology of the respiratory system, pulmonary mechanics, gas exchange,

and control of ventilation, as well as infections and diseases of the respiratory system.

4.5 credits

*IBSSD 1535 Gastrointestinal System*

This course presents an interdisciplinary approach to the gastrointestinal (GI) system. The disciplines of gross anatomy, histology, biochemistry, physiology, microbiology and pathology cover structure, function and common pathologies of the tube of the GI tract and its associated secretory organs. Additional topics include oral, intestinal and hepatic infections, disorders of hepatic metabolism, and oral health nutrition.

3.5 credits

*DENTD 1547 Healthcare Ethics*

Healthcare Ethics introduces dental students to the broad concepts of ethical and professional obligations, guidelines, reasoning, and decision-making involving the doctor-patient relationship and the delivery of healthcare.

0.5 credits

*IBSSD 1540 Endocrinology/Urinary and Reproductive Systems, Growth and Aging*

This course spans four interdisciplinary modules that provide a basic overview of the endocrine, urogenital and reproductive systems, somatic growth, and aging. Module (1): Endocrinology. The disciplines of histology, physiology, and pathology cover the basic structure and function of the endocrine system. Topics include histology of endocrine glands, regulation of hormonal secretion, physiological effects of hormones, and common disorders and diseases of the endocrine system, with an emphasis on diabetes. Module (2): Urinary System. The disciplines of gross anatomy, histology and physiology cover the structure and function of the urinary system. Topics include the gross anatomy and histology of the urinary systems, physiology of renal blood flow, tubular transport, and control of extracellular fluid volume and composition. Module (3): Acid Base/Renal pathophysiology/Female Reproductive System. The disciplines of anatomy, histology, physiology and pathology complete the coverage of the urinary system and survey the structure, function and pathology of the female reproductive system. Topics include acid base physiology, renal pathophysiology, the menstrual cycle, pregnancy, menopause, and common pathologies of the female reproductive system. Module (4): Male Reproductive System/Growth and Aging. The disciplines of gross anatomy, histology, physiology, microbiology, and pathology cover structure, function, and pathologies of the male reproductive system and sexually transmitted diseases. In addition, the disciplines of physiology and biochemistry cover growth hormones, somatic growth, puberty, and aging.

4.5 credits

*IBSSD 1541 Gross Anatomy for Dental Students*

Dental Gross Anatomy is an integrated, interdisciplinary course that includes detailed study of the upper extremity, back, neck and head anatomy relevant to dental medicine. The course consists of didactic lectures and guided, cadaver-based pro-section laboratory activities. Integrated lectures are given by faculty in the Departments of Anatomy, Physiology, Microbiology, and Pathology. Emphasis is placed on clinical application of anatomical knowledge. The course is organized as a series of modules that provide an in-depth look at the structure and function of the following: Module 1: Musculoskeletal Anatomy of the Trunk and Upper limb; Module 2: Neck and Skull; Module 3: Face and Scalp; Module 4: Orbit, Ear, and Temporomandibular joint; Module 5: Pharynx, Larynx, and Nasal Cavity; Module 6: Oral Cavity  
4.5 credits

*PHARD 1620, 1630 General Pharmacology I, II*

These courses place an emphasis on the physical and chemical properties of the drugs, dosages, and therapeutic effects, methods of administration and indications/contraindications for the use of the drug.  
PHARD 1620 - 2 credits; PHARD 1630 - 3 credits

**Behavioral Science Education**

*DENTD 1529, 1539, 1549, 1629, 1639, 1649 Preclinical Professionalism I, II, III, IV, V, VI*

These courses span the D1 and D2 years and serve as a transition to Clinical Professionalism in the D3 and D4 years. These quarterly courses contain no formal class sessions or written examinations. The courses monitor and evaluate student dentists' relationships with their peers, faculty, and staff and their professional conduct. The course grading philosophy assumes a professional behavioral norm in which all encounters and personal interactions are handled appropriately and professionally. Each student dentist begins the course with 100 points. Points are deducted if there are departures from the norm of excellent interactions with peers, faculty, and staff, and professional conduct.  
Each course 0.5 credits

*DENTD 1524, 1534 Preventive Dental Medicine I and II*

These two courses cover important concepts in preventive dental medicine. Through lectures and hands-on exercises in the Simulation Clinic, students learn how to establish their own oral health. They also learn the science and practice of oral health assessment and preventive dental treatment modalities. Course instruction focuses on ways to promote one's own oral health, the health of one's patients, and the health of one's community at large. Methods learned and forms used in the courses are incorporated into subsequent patient care in the Dental Institute.  
Each course 1 credit

*DENTD 1525 Personal Finance*

This course introduces the new dental student to effective personal financial management. Topics include the economy's effect on credit and debt, personal money management, managing credit, and debt and personal needs.  
0.5 credits

*DENTD 1546 Introduction to Human Behavior I*

This course introduces the fundamentals of effective communication and relationship-building skills. Topics covered include rapport-building skills with patients and colleagues, emotional intelligence, personality types, conflict resolution, and team-building strategies.  
1 credit

*DENTD 1637 Dental Ethics and Professionalism*

Dental Ethics and Professionalism uses a case-based approach to clinical ethical reasoning and examination of ethical issues and dilemmas in the dental care setting. The course also addresses expectations for professional behavior among dental practitioners.  
0.5 credits

*DENTD 1626, 1636, 1646 Dental Community Service I, II, III*

In these Dental Community Service courses, second year dental students participate in visits to elementary and junior high schools to provide health promotion education to students in oral disease prevention, tobacco cessation, and drug avoidance. Each student participates on two half-days per quarter.  
Each course 0.5 credits

*DENTD 1723 Introduction to Human Behavior II*

This course covers advanced communication and human interaction skills. Topics include leadership skills, advanced NLP learning styles, case presentation skills, interviewing skills, and practice management topics related to the 'people' side of dentistry.  
1 credit

*DENTD 1725 Dental Ethics Grand Rounds*

Dental Ethics Grand Rounds involves a series of large case study analyses through self-study, small group discussion, and in-class discussion.  
0.5 credits

*DENTD 1746 Special Needs*

Recognizing the unique dental and medical needs of patients who are medically compromised or have mental or physical limitations, this course helps students develop the knowledge and skills needed to render comprehensive oral health care to this population. Students gain an understanding of the complexities of compromises and limitations, learn about

adaptive devices and management techniques, and study the role of dentistry in total patient care while learning to manage patients with medical and physical disabilities. Topics include pediatric, adult, and geriatric special needs; sedation and OR indications; and occupational therapy and pharmacology uses.

1 credit

#### *DENTD 1827 Dental Ethics Capstone*

This course is a capstone experience where students describe and analyze, in writing, a significant ethical issue or dilemma they have encountered in dental school.

0.5 credits

### **Clinical Education**

#### *DENTD 1522, 1532, 1542, 1622, 1632, 1642 Oral Health Sciences I, II, III, IV, V, VI*

These continuously running didactic courses take the student from dental morphology and occlusion and through basic to advanced clinical dentistry of operative dentistry, fixed and removable prosthodontics (including principles and applications of CAD/CAM and implant dentistry), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics, and temporomandibular function and dysfunction. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, oral pathology, and dental material science into its core while continuously utilizing a case-based, evidenced-based approach from a patient perspective.

DENTD 1522 - 3 credits; DENTD 1532, 1542 - each course 2.5 credits; DENTD 1622, 1632 - each course 10.5 credits; DENTD 1642 - 9.5 credits

#### *DENTD 1522L, 1532L, 1542L, 1622L, 1632L, 1642L Oral Health Sciences I, II, III, IV, V, VI Lab*

These continuously running laboratory courses, which are simulation clinic modules, take the student from dental morphology and occlusion and through basic to advanced clinical dentistry in operative dentistry, fixed and removable prosthodontics (including design and fabrication of CAD/CAM restorations and implant placement and restoration), rotary endodontics, pediatric dentistry, oral surgery, oral medicine, periodontics, orthodontics and temporomandibular function and dysfunction introducing therapeutic appliance diagnosis and fabrication. The courses are organized into tooth systems. Each system integrates such topics as growth and development, cariology, radiology, and dental material science into the core of restorative procedures from pediatric to geriatric patients. Simulated clinical competencies integrate radiographic diagnosis, basic science, and treatment planning in conjunction with typical psychomotor skills to enhance the comprehensive preclinical learning experience.

DENTD 1522L, 1532L, 1542L - each course 2 credits; DENTD 1622L, 1632L - each course 7 credits; DENTD 1642L - 8 credits

#### *DENTD 1624, 1634, 1644 Clinical Case Studies I, II, III*

This seminar series allows the dental students to participate in treatment planning options for complex dental cases and requires them to work up primary and alternative treatment plans for complex patients likely to be seen in a general practice, and present the plans to their faculty mentors in a case presentation format. This course runs for three quarters during the second-year curriculum where cases will become increasingly more challenging.

Each course 1 credit

#### *DENTD 1638 Medical Emergencies*

This course covers the management of medical emergencies likely to be seen in a dental office.

1 credit

#### *DENTD 1647, 1713 Anesthesia I, II*

Anesthesia I covers the anatomy, medical considerations, pharmacology, techniques, and complications of local anesthesia in dental practice. Anesthesia II covers nitrous oxide administration; oral, IM, IV, and conscious sedation; general anesthesia; and emergency management. Clinical experiences occur in subsequent clinical courses.

Each course 1 credit

#### *DENTD 1710 Oral Health Sciences 3.1A*

This course is the dental student's first major exposure to direct patient care. Working in D3/D4 pairs, with students alternating as operators and assistants, students learn the clinical organization, clinical policies and procedures, the clinic software system, the clinic's equipment, and expectations for patient relations and professionalism, while initiating care under the supervision of a faculty member group leader for a small family of patients assigned to the student pair and shared by them.

12 credits

#### *DENTD 1720, 1730, 1740, 1810, 1820, 1830, 1840 Oral Health Sciences 3.2A, 3.3A, 3.4A, 4.1A, 4.2A, 4.3A, 4.4A*

In the Oral Health Sciences courses, students learn patient-centered oral health care and develop the clinical competencies required for entry to the general practice of dentistry. By providing patient care under the supervision, guidance, and support of the faculty, students enhance their diagnostic, technical, and interpersonal skills. The course emphasizes the importance of these skills in effective, efficient, and compassionate patient care and guides the students toward independent practice by evaluating competence in the delivering specific services, providing high-quality comprehensive care to all patients, maintaining

professionalism in the delivery of care, evaluating accurately one's clinical performance, and practicing efficiently and profitably.

DENTD 1720, 1730, 1740 - each course 12; DENTD 1810, 1820, 1830, 1840 - each course 11.5 credits

*DENTD 1712, 1722, 1732, 1742, 1812, 1822, 1832, 1842 Clinical Professionalism Introduction, I, II, III, IV, V, VI, VII*

The Clinical Professionalism courses contain no formal class sessions or written examinations. The courses monitor and evaluate students' relationships with their patients and their professional conduct in clinic attendance, patient relations, timeliness and continuity of care, patient record management, administrative matters, and professional conduct. The grading philosophy assumes a professional behavioral norm in which all patient encounters and personal interactions are handled appropriately and professionally. Points are deducted for departures from the norm of excellent patient relations, patient management, or professional conduct.

Each course 1.5 credits

*DENTD 1714 Surgical Periodontics General Practice*

This course covers periodontal surgeries commonly performed by general practitioners and periodontists. Topics include evidence-based clinical decision-making; resective, regenerative, and plastic surgical techniques; complications of periodontal surgery; and management and maintenance of the surgical patient.

1 credit

*DENTD 1716, 1726, 1826 Clinical Conference I, II, III*

This course sequence consists of informational sessions about clinical operations, clinical policies, competency assessments, mock boards, real boards, and other matters or issues arising in the delivery of patient care in a learning environment.

DENTD 1716 - 1 credit; DENTD 1726, 1826 - each course 0.5 credit credits

*DENTD 1717 Advanced Imaging*

This course includes lectures and small group discussions, complemented by "hands-on" exercise using patient simulation cone beam computed tomography scans. Students learn coronal, sagittal, and axial planes and how to arrange the data in cross-sections for evaluation of the TMJ, implant treatment planning, orthodontics, etc. This course introduces the dental students to acquisition and interpretation of cone beam CT scans for the practice of dentistry.

1 credit

*DENTD 1724 Clinical Reviews*

This course provides a comprehensive review of the major clinical disciplines in dentistry to reinforce previous

preclinical instruction and learning and further prepare students to deliver comprehensive patient care.

2 credits

*DENTD 1733 Implantology*

This course focuses on the clinical applications of dental implant treatment. Topics include various case selection, restorative techniques, and surgical techniques in dental implantology for the general dentist.

1 credit

*DENTD 1734, 1824 Clinical Pharmacology I, II*

Clinical Pharmacology focuses on the application of safe and effective pharmacology for dental patients. Through case-based instruction, topics include identifying the effects of medications taken by patients on the delivery of dental care and the implications and contraindications of medications used or prescribed by the dentist.

Each course 1 credit

*DENTD 1735, 1745, 1815 Practice Management I, II, III*

The Practice Management courses introduce the dental student to the business, financial, and personnel aspects of dental practice. Course themes include practice building, office finances and business systems, and practice acquisition.

Each course 1 credit

*DENTD 1736 Clinical Topics*

These courses provide further instruction in the dental disciplines and specialties, covering various clinical topics, materials, procedures, and methods to improve dental care for patients.

1 credit

*DENTD 1743 Occlusion*

The Occlusion course teaches the fundamentals of how the movable mandibular arch works in coordinated occlusion with the fixed maxillary arch, the role of appropriate occlusion in creating dental restorations, and the diagnosis and management of occlusal disorders.

1 credit

*DENTD 1744, 1814 Oral Pathology I, II*

Oral Pathology focuses on identification and differential diagnosis of the oral pathology lesions most commonly encountered in general dental practices. Through Case-based instruction and clinical imaging, topics include hard tissue diseases and soft tissue pathoses.

Each course 1 credit

*DENTD 1880 Clinical Service Learning*

In the Clinical Service Learning course, fourth-year dental students participate in rotations in community-based dental clinics providing dental care services to pediatric and



underserved populations. Each student participates two weeks.

2 credits

#### *DENTD 1825 Practice Management Selectives*

In Practice Management Selectives, each student chooses one selective track, based on the student's plans for practice after graduation. Tracks include Residency or Graduate Program, Private Practice Associate, Private Practice Owner, Corporate Dentistry, Military Forces, Public Health and Prison Systems and Academics.

0.5 credits

#### *DENTD 1828, 1838 Advanced Topics I, II*

These two courses provide lectures in a variety of topics of student and faculty interest and build upon the instruction provided in previous courses.

Each course 1 credit

#### *DENTD 1834 Advanced Practice Management*

The Advanced Practice Management course builds on the previous practice management courses and continues preparation of the graduate for management of the dental practice and leadership of the oral health team.

1 credit

## STUDENT ACADEMIC POLICIES

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates by the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### **Student Academic Progress Committee, Preclinical and Clinical**

Two faculty committees of CDMI will review the academic performance of students: the Student Academic Progress Committee, Preclinical for the first two years and the Student Academic Progress Committee, Clinical for the third and fourth years.

Both progress committees meet at the end of each academic quarter to assess the academic status of students with a F, a WF, an I or an IP grade and assess the progress of each student. Students who attain satisfactory academic and professional progress are promoted to the next academic quarter, provided all tuition and fees have been paid.

Students with one or more course failure or WF are given the opportunity to meet with the appropriate Student Progress Committee. Notification of the date, time, and place of the committee meeting is sent to the student at least 48 hours in advance by priority email and/or telephone. Students are invited to the meeting to give a statement, to teleconference into the meeting by telephone, or provide a statement by e-mail or in writing, should they so desire. Decisions of the committee are forwarded to the Dean and emailed to the student. The right of appeal exists and is described in the Appeals Process section. Appeals must be filed with the Dean within three working days following official notification of the committee decision.

Students who have successfully completed their clinical education, passed all of the competency evaluations, and paid all tuition and fees will be recommended for graduation to the Faculty Senate.

### **Academic Failure**

Students who accumulate three failures over more than a single academic year, or two failures in a single quarter, may be recommended for dismissal or an academic leave of absence. Students returning from an academic leave of absence are required to retake failed courses. The grade for a course repeated at an outside institution or at Midwestern University and passed is recorded as a grade of "C". The previous "F" course grade remains on the official transcript but does not calculate into the overall Grade Point Average.

Students may be dismissed from the academic program for the following reasons:

- Accumulate 4 or more failures within the four year curriculum
- Accumulate 3 or more failures in a single academic year
- Accumulate 2 or more failures in a single academic quarter
- Fail the repeat of a course previously failed

Any failures must be repeated within one year, unless an extension is granted by the Associate Dean for Academic Affairs and the Dean.

*Please Note:* Students will be assessed tuition and related fees for any additional years.

### **Readmission after Dismissal for Poor Academic Performance**

It is at the discretion of the CDMI academic program to readmit a student who has been dismissed for poor academic performance. To initiate the reapplication process, candidates must complete and submit a new application and proceed through the standard application process established by the program. Before reapplying, however, individuals should seek

the advice of an admissions counselor. It is expected that the individual would have addressed documented deficiencies before reapplication and be able to demonstrate that he/she meets all admission requirements and technical standards of the program.

The College's Admissions Committee will review completed applications of candidates and submit recommendations to the Dean for action. The CDMI Dean, via the Office of Admissions, then notifies applicants in writing of admission decisions.

No guarantee of readmission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Reapplications are allowed only within the first two years following dismissal. Readmission will be granted only once.

### **Academic Warning**

An academic warning is a formal notification of substandard, quarterly academic performance, which cautions the student that continued performance at this level may result in the student being placed on academic probation. To return to good academic standing, a student must correct deficiencies and incur no further failures. An academic warning is issued by a Promotions Committee when a student has failed (grade of less than 70) one class in a quarter or upon the unsuccessful completion of a probationary quarter. When a student is placed on academic warning, it is noted in the student's academic file. Subsequently, when a student is returned to good academic standing, this is also noted in the student's file. Academic warning is not noted on transcripts. Students on academic warning are ineligible to hold student organizational offices unless appealed to, and approved by, the Dean.

### **Academic Probation**

Academic Probation represents notice that continued inadequate academic performance might result in dismissal. If a student on academic probation successfully completes a probationary quarter, the student's academic status reverts to academic warning. To return to good academic standing, a student must correct deficiencies and incur no further failures. When a student is placed on academic probation, it is noted in the student's academic file. Subsequently, when a student is returned to good academic standing, this is also noted in the student's file. Academic probation is not noted on transcripts. Students on academic probation are ineligible to hold student organizational offices.

### **Advanced Standing**

All requests for advanced standing by admitted, transfer, or enrolled students are processed on a course-by-course basis by the Dean. Courses must be at the graduate level to be considered for advanced standing. To request advanced standing, a student must submit a letter to the Dean in which

the student includes a list of the course(s), an official course description(s), a transcript, and a syllabus of the course(s) previously taken. It is expected that a minimum grade of a "B" would have been achieved in the class being petitioned. The decision to grant or deny advanced standing will be made by the divisions providing the dental course in consultation with the CDMI Dean's Office.

### **Appeal Process**

Following notification of a decision of the Student Promotion Committee, a student may appeal the decision in writing within three working days from notification of the decision to the Dean of the College of Dental Medicine-Illinois. The Dean makes the final decision. The Dean may grant an appeal only if a student can demonstrate one of the following:

1. Bias of one or more committee members
2. Material information not available to the committee at the time of its initial decision
3. Procedural error

During the appeal process, the student must continue to attend classes.

### **Disciplinary Warning/Probation**

Disciplinary warning/probation occurs for student acts of professional misconduct as defined in Appendices 2 and 4 of the Student Handbook. Disciplinary probation is not noted on transcript but is kept in the student's disciplinary file. Disciplinary probation information may be shared with clinical sites that are affiliated with Midwestern University educational programs.

### **Dismissal**

Matriculation and participation in dental school is a privilege, not a right. Therefore, a student can be dismissed for the following reasons:

1. failure to achieve minimum academic standards (preclinical or clinical promotions committees)
2. failure to exhibit the personal qualifications and ethical standards necessary to the practice of dentistry (student judicial process)
3. violation of Midwestern University College of Dental Medicine-Illinois rules and regulations that are grounds for dismissal (student and administrative judicial process).

*Please Note:* Students will be assessed full tuition for any additional years.

### **Course Failure Policy**

The faculty provides didactic programs and measures students' performance in subject areas deemed necessary to become dental practitioners. Students who do not

demonstrate minimum competencies assume the obligation and responsibility to make up academic failures. D-1 and D-2 students must successfully pass all failed courses before they can be promoted to the following year. D-3 and D-4 students must remediate/repeat any failed courses. Usually this occurs within the first month of the subsequent quarter.

#### **Grade for Retaken Course**

If a student receives a failing grade, that grade is recorded on the transcript as a letter grade (an "F" entry). Upon repetition of a failed course, the original grade of "F" remains on the transcript and the repeated course and a new grade is entered on the transcript. The grade for a failed course repeated and passed at Midwestern University or at an outside institution is recorded on the transcript as a grade of "C." For all failed clinical courses at Midwestern University that are repeated and passed, a grade of "C" will be recorded on the transcript. For both preclinical coursework and clinical courses that are repeated, the original failing grade will remain on the transcript but will not be included in the GPA calculations. If a repeated preclinical or clinical course is failed, a grade of "F" is again recorded on the transcript. Students who fail a course a second time will be recommended for dismissal.

#### **Faculty Advisor Program**

The advisor program plays an important role at Midwestern University College of Dental Medicine-Illinois. Students and

faculty work closely together in the academic arena. This kind of educational interaction permits students to get to know their faculty and vice versa. Students are encouraged to use the advice, expertise, and help of the faculty. Students should feel free to contact a faculty member of their choice for advice, encouragement, and support.

#### **Grade Point Average**

The grade point average is a weighted average computed using the number of credits assigned to each course and the quality points corresponding to the letter grade earned in each course. It is determined by calculating the total number of quality points earned and dividing them by the total number of credits carried. The total quality points earned for each course is determined by multiplying the quality points earned per credit (corresponding to the letter grade) by the number of credits assigned to the course. The student's cumulative grade point average is computed and recorded by the Office of the Registrar. It is calculated beginning at the end of the first quarter of enrollment, and does not include any grades or credits for courses audited or accepted for transfer, or courses with a grade of withdrawal (W), withdrawal failing (WF), pass (P) or failed (F) that were later repeated.

## Grading System

Students receive letter grades corresponding to the level of achievement in each course, based on the results of examinations, required course work, and, as applicable, other established criteria. The letter grades, percent ranges, and quality points per credit are as follows:

Grade	Percent (%)	Quality Points (per credit)	Comments
A	93–100	4.00	—
A–	90–92	3.67	—
B+	87–89	3.33	—
B	83–86	3.00	—
B–	80–82	2.67	—
C+	77–79	2.33	—
C	70–76	2.00	—
F	< 70	0.00	For professional programs
I	—	0.00	An Incomplete (I) grade may be assigned by a course director when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete grades must be resolved within 10 calendar days from the end of final exams for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade, with notice to the Registrar. If an incomplete grade remains beyond 10 days, it may be converted to a grade of "F," which signifies failure of the course.
IP	—	0.00	An In Progress (IP) grade may be assigned by a course director when a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "IP" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time, up to one month to complete required coursework. The "IP" in progress is used when extenuating circumstances make it necessary to extend the grade completion period past 10 days (illness, family death, etc). The completion period should not exceed one quarter with notification to the Registrar.
P	—	0.00	Pass; designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of 'P' is counted toward credit hour accruals for graduation but is not counted in any GPA calculations.
W	—	0.00	Withdrawal can be given during the third to the eighth weeks of the quarter. There is no penalty and no credit.
WF	—	0.00	Withdrawal/Failing is given after 50% of the course is complete and the average grade indicates that the work completed up to the time of withdrawal was unsatisfactory. This grade is not counted in any GPA calculations and is not counted in credit hour accruals for graduation. W/F may be considered as a failure by a Program Student Academic Review Committee.
AU	—	0.00	This designation indicates an audited course, that is, a student registered for a course with the understanding that neither academic credit nor a grade is earned. The possibility does not exist to change the course status from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
AP			This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals, but is not counted in the GPA calculation.

*These grading scales apply to all courses unless otherwise noted in the course syllabus.*

### **Immunization Policy for CDMI**

Full-time students are required to have all immunizations as outlined in the general policy section of the student handbook. Immunization requirements for CDMI students are subject to current Center for Disease Control and Prevention guidelines, applicable state health department protocols and affiliated rotation sites requirements. Students who do not adhere to the immunization policy by the stated deadline may jeopardize their standing in the College.

### **Leave of Absence (LOA)**

*Academic.* A student may be placed on LOA for academic reasons upon a determination of the Student Clinical Promotions Committee. A student on LOA for academic reasons is automatically placed on academic probation. Students will be assessed tuition for any additional instruction required as a result of the LOA. An academic LOA will result in a delay in the expected graduation date.

*Voluntary.* Students who wish to voluntarily initiate a leave of absence for personal or medical reasons should contact the Associate Dean for Academic Affairs. Additional coursework, for which students will be assessed tuition, may be required of students returning from a personal or medical LOA. A voluntary LOA may result in a delay in the expected graduation date.

### **Integrated National Board Dental Examination (INBDE) Policy**

Students must challenge the INBDE during the fall or winter quarter of the DMD-4 year. If a student encounters a catastrophic event that prevents them from taking the examination during that timeframe, the Dean may allow challenging of the examination at a later date.

Students who fail to pass the INBDE:

1. Should retake the exam within six months from the date of the first attempt.
2. Should meet with the Dean (or designee) and selected Course Coordinators/Directors to develop an individualized course of study focused toward retaking and passing the INBDE. This will include recommendations to the student to uncover potential test-taking challenges and develop a structured study schedule.

Passing any portion of a licensing examination is not a substitute for passing a Midwestern University course.

### **Satisfactory Academic Progress**

As required by federal law, reasonable standards of satisfactory academic progress have been established by Midwestern University College of Dental Medicine-Illinois for the Doctor of Dental Medicine program. These standards apply to all students applying for, or currently receiving, financial assistance. The policy and procedure for assessing

financial aid status are noted in the Student Financial Services section of this catalog.

CDMI students must maintain a minimum GPA of 3.0 to be eligible to engage in student organization leadership roles or attend professional association meetings or other elective events that may interfere with curriculum time or academic progress.

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# CHICAGO COLLEGE OF OPTOMETRY

## MISSION

The mission of the Chicago College of Optometry is to develop competent individuals who embrace lifelong learning through the pursuit of excellence in education, research, scholarship, and patient care for a diverse society. The College's educational programs emphasize and promote public health, leadership, ethics, professionalism, compassion, commitment, collegiality, and sense of community.

## VISION AND GOALS

The Midwestern University Chicago College of Optometry has the vision to:

- Deliver an exceptional optometric educational experience utilizing our unique multi-health professional setting and cutting edge technology.
- Provide our students with the knowledge and skills to deliver the highest level of professional, ethical and compassionate eye and vision care.
- Recruit qualified students; promote lifelong learning, community outreach, and innovative research; and develop leaders in the profession and communities.

The Midwestern University Chicago College of Optometry will pursue the following goals:

- Deliver a comprehensive Doctor of Optometry degree program that prepares graduates for contemporary entry-level practice and encourages and fosters advanced training, in order to serve the interests and needs of the broader community.
- Present an innovative optometry program with faculty committed to learning and teaching the current research and evidence based medicine applications using technologies to provide an exceptional educational experience for students.
- Develop and support the faculty and students in their commitment to research and scholarly activities and excellence in patient care.
- Graduate students who have achieved the learning outcomes as defined by the Faculty.

- Improve patient care through promotion of interprofessional educational programming and the Midwestern University One Health Quality Initiative.
- Foster a commitment to professional, collegial, and ethical practices in patient care while promoting public service to diverse communities.
- Develop a high quality program appropriate for optometry residents at an affiliated or Midwestern University sponsored accredited optometry residency site.
- Serve the eye and vision healthcare needs of Downers Grove and neighboring communities through the Midwestern University Eye Institute.
- Provide and encourage lifelong learning and support services to the optometric profession.
- Develop leaders in the optometric profession and the healthcare community.

## ACCREDITATION

The Midwestern University Chicago College of Optometry has been granted the accreditation classification of "Preliminary Approval" as of March 2, 2016 by the Accreditation Council on Optometric Education (ACOE), of the American Optometric Association (AOA), 243 N. Lindbergh Blvd., St. Louis, MO 63141; phone 800/365-2219. "Preliminary Approval" is the classification granted to a professional degree program that has clearly demonstrated it is developing in accordance with Council standards.

Midwestern University is accredited by The Higher Learning Commission, located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411; phone 312/263-0456.

## DEGREE DESCRIPTION

Midwestern University Chicago College of Optometry (CCO) awards the degree Doctor of Optometry (O.D.) upon successful completion of the four-year professional curriculum in optometry. The first and second years of the curriculum emphasize basic health sciences, optics and visual science and students are introduced to clinical practice in simulation laboratories, didactic courses and clinical experiences. Visual consequences of disease are introduced in

the second year. The third year, divided between a didactic and clinical setting, emphasizes the diagnosis and treatment of ocular dysfunction and disease. The fourth year consists of intensive clinical training that includes both on campus and off campus clinical rotations. Clinical settings for external rotations may include military facilities, Veterans Administration hospitals, public health service hospitals, and specialty and/or private practices or clinics.

## ADMISSIONS

CCO considers for admission those students who possess the academic, professional, and personal qualities necessary for development as exemplary optometrists. CCO uses multiple criteria to select the most qualified candidates including cumulative and science grade point averages (GPAs), admission test scores, personal experiences and character, ability to communicate, familiarity with the profession, volunteer/community involvement, research experience, and other considerations. CCO uses a rolling admissions process.

### Admission Requirements

Students seeking admission to CCO must submit the following documented evidence:

1. A minimum cumulative GPA and science coursework GPA of 2.75 on a 4.00 scale.
2. A baccalaureate degree from a regionally accredited institution. A B.A. degree is acceptable, but a B.S. degree is preferred.
3. Results of one of the following admission tests. Applicants must submit scores from one of the following admission tests: Optometry Admission Test (OAT), Medical College Admission Test (MCAT), Dental Aptitude Test (DAT), Pharmacy College Admission Test (PCAT), or the Graduate Record Exam (GRE). A competitive test score (at least at or above the mean score for each exam) is recommended of all applicants. In order to be considered for the class to be admitted in the Fall of each academic year, the admission test must be taken and results submitted by April 30<sup>th</sup> of the year of matriculation. Entrance exam scores must be earned no more than five years prior to the planned enrollment year.
4. Necessary course prerequisites. All prerequisite courses must be completed with grades of C or better prior to matriculation. Only courses designed for science majors or pre-professional students are acceptable for the science prerequisites.
5. Two letters of recommendation. One letter must be from a practicing optometrist. The other letter must be from a prehealth advisor, a professor, an employer or an extracurricular activity advisor. Letters of recommendation from relatives, personal and/or family friends are not acceptable.
6. A good understanding of optometric medicine. Candidates are strongly encouraged to shadow and

observe a number of practicing optometrists in the clinical setting.

7. Extracurricular and/or community activities that indicate a well-rounded background and demonstrate a commitment to service.
8. Interpersonal and communication skills necessary to relate effectively with others.
9. Passage of the Midwestern University criminal background check.
10. A commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.

### Prerequisite Courses

Course	Sem Hrs	Qtr Hrs
Biology with lab	8	12
Anatomy*	3	4
Physiology*	3	4
General/Inorganic Chemistry with lab	8	12
Organic Chemistry with lab	4	6
Biochemistry	3	4
Physics	6	9
Calculus	3	4
Microbiology	3	4
Statistics	3	4
Psychology	3	4
English	6	9

*\*The Anatomy and Physiology requirements may also be fulfilled by taking Anatomy and Physiology I (3 Sem/4 Qtr credit hours) and Anatomy and Physiology II (3 Sem/4 Qtr credit hours).*

The Doctor of Optometry degree program is rigorous and challenging. The Admissions Committee will therefore assess the quality and rigor of the pre-optometry academic records presented by applicants. When assessing an application, the Admissions Committee will view with concern applicants with:

1. Cumulative and science grade point averages below 3.00 on a 4.00 scale.
2. Admission test scores below the mean for each exam.
3. Prerequisite science coursework completed more than 10 years ago. More recent (within five years) math and science coursework is preferred.

## **Application Process and Deadlines**

Applicants are strongly encouraged to apply early in the cycle. Applications are considered on a first come first served basis only until all seats are filled.

### 1. OptomCAS Application

Applicants are required to submit online applications and application fees to OptomCAS by April 1, 2021. In addition to the online application and application fees, an applicant must forward to OptomCAS official transcripts from all colleges and universities attended by the April 1st date. OptomCAS will begin the verification process as official transcripts are received, however an application will not be considered complete until all official transcripts are received. Students must apply for admission via OptomCAS at [www.opted.org](http://www.opted.org) or [www.optomcas.org](http://www.optomcas.org). Please refer to the OptomCAS application instructions for specific details about completing the OptomCAS application, required documents, and processing times. OptomCAS applications are available starting Summer 2020 for applicants seeking admission in August of the following year. Due to the large number of applicants and the limited number of seats available, students are strongly encouraged to complete their OptomCAS application early in the cycle. CCO will consider completed applications on a first-come, first-served basis until all seats are filled.

### 2. Admission Test Score

CCO prefers the OAT, but will accept the MCAT, DAT, PCAT, or GRE test scores as an alternative. Applicants must arrange for scores from the admission exam to be sent directly to Northwestern University. Only test scores received directly from the testing agency will be accepted. Any of these admission exam scores must be earned no more than five years prior to the planned enrollment year. Additional information on the OAT may be found at [www.opted.org](http://www.opted.org) or in writing to:

*Optometry Admission Testing Program  
211 East Chicago Avenue  
Chicago, Illinois 60611  
800/232-1694  
email: [oatexam@ada.org](mailto:oatexam@ada.org)*

### 3. Letters of Recommendation

Applicants must submit two letters of recommendation from professionals to OptomCAS ([www.optomcas.org](http://www.optomcas.org)). One letter must be from a practicing optometrist. The other letter must be from a prehealth advisor, a professor, an employer, or an extracurricular activity advisor. Letters of recommendation from relatives, personal and/or family friends are not acceptable.

### 4. Completed Application

All application materials, including the OptomCAS application, admission test scores (as reported to Northwestern University), and two letters of recommendation (as submitted to OptomCAS) must be received by the Office of Admissions on or before April 30, 2021. Only completed applications received by the Office of Admissions on or before the deadline date will be reviewed for potential entrance into the program.

*Please Note:* Applicants are responsible for tracking the receipt of their application materials and verifying the status of their applications on the University website. The Office of Admissions will send qualified applicants instructions for checking the status of their application materials online.

Applicants are responsible for notifying the Office of Admissions of any changes in their mailing address or e-mail address.

Northwestern University  
Office of Admissions  
555 31st Street Downers Grove, IL 60515  
630/515-7200 or 800/458-6253  
[admissil@northwestern.edu](mailto:admissil@northwestern.edu)

### **Rolling Admissions**

CCO uses a rolling admissions process in which applications are processed and reviewed during regular intervals in the admissions cycle until the class is filled.

### **Interview Process**

Before an invitation is issued to attend an on-campus interview, applicants must meet the admission requirements listed previously. After the Office of Admissions receives all required application materials, applicant files are reviewed to determine whether an applicant merits an invitation for an interview. Applicants may also be placed on a waiting list pending possible openings in a later part of the admissions cycle. Interviews are typically held between September and May of a given admission cycle. Invited applicants must attend an on-campus interview to achieve further consideration in the admissions process.

The on-campus visit, which includes a closed-file interview session, generally takes six hours. Applicants will be evaluated on verbal communication skills, understanding of the optometry profession, commitment to patient care, and other elements as determined by the College. Applicants will also learn more about Northwestern University, CCO, financial aid programs, student services, and campus housing, as well as tour the Northwestern University Downers Grove Campus and Eye Institute.

Following the interview, an applicant's file will be forwarded to the Admissions Committee for review. The committee

may recommend accepting, denying, or placing students on an alternate list. Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status within two weeks of their interview date, provided that the file is complete.

Any request for withdrawal of an application must be made in writing.

### **Technical Standards**

The Technical Standards set forth the nonacademic abilities considered essential for students to achieve the level of competence required by the faculty to obtain the academic degree awarded by the College. The health care provider must be able to perform tasks in an efficient and timely manner to diagnose, treat, and manage patients.

Therefore, the following abilities and expectations must be met by all students admitted to the College with reasonable accommodation. Candidates must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) intellectual, conceptual, integrative, quantitative; 5) behavioral and social. Technological compensation can be made for some limitation in certain of these areas but the candidates must be able to perform in a reasonably independent, timely manner.

1. **Observation:** The candidate must be able to accurately make observations at a distance and close at hand. Observation necessitates the functional use of the sense of vision, hearing and sense of touch and is enhanced by the functional use of all of the other senses.
2. **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively in both oral and written form and be able to perceive nonverbal communication.
3. **Motor:** Candidates must be able to coordinate both gross and fine muscular movements, maintain equilibrium and have functional use of the senses of hearing, touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination to perform profession-specific skills and tasks.
4. **Intellectual, Conceptual, Integrative and Quantitative Abilities:** The candidate must be able to problem solve, measure, calculate, reason, analyze, record and synthesize large amounts of information in a timely manner. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.
5. **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, the consistent, prompt completion of all responsibilities, and the development of mature, sensitive and effective

relationships. Candidates must be able to tolerate physically, mentally and emotionally taxing workloads and to function effectively under stress. The candidate must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, and interest and motivation to learn are all personal qualities required during the educational process.

Candidates are required to verify that they understand and are able to meet these Technical Standards at least 4 weeks prior to matriculation (or if admitted later, within 1 week of deposit). Candidates who may only meet Technical Standards with accommodation, must contact the Office of Student Services to make a formal request for accommodation. The Dean of Students, in consultation with the College Dean/Program Director, will determine what reasonable accommodations can be provided. The College is not able to grant accommodations that alter the educational standards of the curriculum.

Students must meet the Technical Standards for the duration of enrollment at the College. After matriculation, if a student fails to continue to meet the Technical Standards during subsequent enrollment, the student may apply for accommodation by contacting the Office of Student Services. If the accommodation needed to meet the Technical Standards alters the educational standards of the curriculum, the student's ability to satisfactorily progress in the curriculum will be evaluated by the appropriate College's Student Graduation and Promotion Committee.

### **Dual Acceptance Programs with Selected Affiliated Universities**

The Dual Acceptance Program (DAP) is an early acceptance program for selected students who successfully complete the specified pre-optometry coursework. The Dual Acceptance Programs are currently in effect with Benedictine University, DePaul University, Elmhurst College, and Arizona Christian University.

Benefits of the DAP:

- Provides for an excellent foundation in pre-optometry education.
- Sets out a clear road map for which courses to take and when.
- Exempts the student from the Optometry Admissions Test (OAT) and associated fees.
- Exempts the student from the OptomCAS application process and associated fees.
- Guarantees entry to MWU CCO well in advance with successful completion of all program requirements.

To receive consideration for the Dual Acceptance Program with Benedictine University, DePaul University, or Elmhurst College, one must meet the following eligibility requirements:

#### **Track 1:**

This track is available to high school students who apply by March 1 of their senior year of high school. To receive consideration for the Dual Acceptance Program, Track 1, students must meet the following requirements:

- Earn admission to the undergraduate institution as a first-year student.
- Must obtain a minimum score of 26 (ACT) or 1250 (SAT) on a College Entrance Exam.
- Obtain a minimum high school GPA of 3.20/4.00.
- Demonstrate a people or service orientation through community service or extracurricular activities.
- Demonstrate commitment to the optometry profession as demonstrated by previous work, volunteer, or other life experiences.
- Possess the oral and written communication skills necessary to interact with patients and colleagues.

#### **Track 2:**

This track is available to students who have recently enrolled at their undergraduate institution. To receive consideration for the Dual Acceptance Program, Track 2, students must meet the following requirements:

- Must be completing their spring term coursework, and must have not been enrolled in any other post-secondary institution.
- Minimum undergraduate overall and science GPA of 3.40/4.00.
- Must have obtained a minimum score of 26 (ACT) or 1250 (SAT) on a College Entrance Exam.
- Demonstrate a people or service orientation through community service or extracurricular activities.
- Demonstrate commitment to the optometry profession as demonstrated by previous work, volunteer, or other life experiences.
- Possess the oral and written communication skills necessary to interact with patients and colleagues

After the Midwestern University Office of Admissions receives all completed application materials, applicant files are reviewed to determine whether applicants merit invitations for an interview. Qualified applicants must complete an on-campus or video teleconference (for out of state students) interview at CCO.

Following the interview, their completed applications are forwarded to the CCO Admissions Committee for review.

The committee may recommend to accept or to deny applicants for admission. These recommendations are then forwarded to the Dean for final approval. The Dean-via the Office of Admissions-notifies applicants of their status within two to four weeks of their visits. Accepted applicants will be ensured a seat at CCO upon successful completion of the program requirements:

1. All prerequisite pre-optometry courses must be completed at the enrolled institution (See below). AP credits that are listed on their transcript are acceptable for meeting the prerequisites.
2. Track 1 students will have up to four years to complete all pre-optometry coursework at **their enrolled institution**, and earn a baccalaureate degree. Track 2 students will have up to three years to complete all pre-optometry coursework at **their enrolled institution**, and earn a baccalaureate degree.
  - Authorization to extend an undergraduate degree beyond 4 years is at the discretion of the Dean, CCO. Requests must be submitted to the CCO office of the Dean; decisions will be made on a case-by-case basis.
3. A minimum overall GPA of 3.40 on a 4.00 scale must be attained.
4. A minimum science GPA of 3.40 on a 4.00 scale must be attained.
5. Students must earn a grade of “C” or higher in all required courses.
6. Students are not permitted to repeat courses for a higher grade for which they have already received credit.
7. Students are not permitted to withdraw from more than 2 courses during their 4-year undergraduate program.
  - Authorization to withdraw from more than 2 courses is at the discretion of the Dean, CCO. Requests must be submitted to the CCO office of the Dean; decisions will be made on a case-by-case basis.
8. Accepted students are required to sign a letter of understanding with CCO upon acceptance. Accepted students will submit a deposit fee to CCO at least 1 year prior to matriculation at CCO. All fees are applied toward the student’s first quarter tuition at CCO.

Students who are not accepted to or fail to complete the Dual Acceptance Program may apply to CCO using the standard procedures.

To receive consideration for the Dual Acceptance Program with Arizona Christian University, high school senior students must meet the following eligibility requirements:

1. Earn admission to Arizona Christian University.
2. Apply online to the CCO Dual Acceptance Program as a high school senior.
3. Obtain a minimum score of 28 on the ACT or 1250 on the SAT.
4. Demonstrate a people or service orientation through community service or extracurricular activities.
5. Demonstrate motivation for and commitment to the optometry profession as demonstrated by previous work, volunteer, or other life experiences.
6. Possess the oral and written communication skills necessary to interact with patients and colleagues.

After the Midwestern University Office of Admissions receives all completed application materials, applicant files are reviewed to determine whether applicants merit invitations for an interview. Qualified applicants must complete an on-campus or video teleconference (for out of state students) interview at CCO.

Following the interview, their completed applications are forwarded to the CCO Admissions Committee for review. The committee may recommend to accept or to deny applicants for admission. These recommendations are then forwarded to the Dean for final approval. The Dean-via the Office of Admissions-notifies applicants of their status within two to four weeks of their visits. Accepted applicants will be ensured a seat at CCO upon successful completion of the program requirements:

1. All prerequisite pre-optometry courses must be completed at Arizona Christian University prior to matriculation to CCO. Official AP and dual-enrollment credits completed during high school, and that are listed on the affiliated university's transcript as equivalent courses, are acceptable for meeting the prerequisites.
2. Complete their baccalaureate degree at Arizona Christian University within 4 years
  - Authorization to extend an undergraduate degree beyond 4 years is at the discretion of the Dean, CCO. Requests must be submitted to the CCO office of the Dean; decisions will be made on a case by case basis.
3. A minimum overall GPA of 3.40 on a 4.00 scale must be attained.
4. A minimum science GPA of 3.40 on a 4.00 scale must be attained.
5. Students must earn a grade of "C" or higher in all required courses. A grade of "C-" or lower is not acceptable.
6. Students are not permitted to withdraw from more than 2 courses during their 4-year undergraduate program.
  - Authorization to withdraw from more than 2 courses is at the discretion of the

Dean, CCO. Requests must be submitted to the CCO office of the Dean; decisions will be made on a case by case basis.

7. Students are not permitted to repeat courses for a higher grade for which they have already received credit.
8. Accepted students are required to sign a letter of understanding upon acceptance. Accepted students will submit a deposit fee within 1 year prior to matriculation. All fees are applied toward the student's first quarter tuition.

Students who are not accepted to or fail to complete the Dual Acceptance Program may apply to CCO using the standard procedures.

Students enrolled at **Benedictine University** must successfully complete the following courses listed below with a grade of “C” or higher:

Requirement	Undergraduate Course	Minimum Semester Hours
Biology with lab	BIOL 1197, 1198, 1199	7 hrs.
Genetics with lab	BIOL 2250, 2251	4 hrs.
Anatomy	BIOL 3203	3 hrs.
Physiology	BIOL 3258	3 hrs.
General/Inorganic Chemistry with labs	CHEM 1113, 1114, 1123, 1124	8 hrs.
Organic Chemistry with lab	CHEM 2242, 2243	4 hrs.
Biochemistry	CHEM 3261	3 hrs.
Physics	PHYS 1113, 1114, 1118, 1119	6 hrs.
Calculus	MATH 2200 or 2210	3 hrs.
Microbiology	BIOL 3208	3 hrs.
Statistics	BIOL 2229 or MATH 1150 or PSYC 2250	3 hrs.
Psychology	PSYC 1100	3 hrs.
English Composition	WRIT 1101, 1102	6 hrs.
<i>Total Hours</i>		<b>56 hrs.</b>

Students enrolled at **DePaul University** must successfully complete the following courses listed below with a grade of “C” or higher:

Requirement	Undergraduate Course	Minimum Semester Hours
Biology with lab	BIO 191,192,193	12 hrs.
Anatomy	HLTH 301	4 hrs.
Physiology	HLTH 302 (HLTH 301 and 302 are integrated anatomy and physiology classes)	4 hrs.

General/Inorganic Chemistry with labs	CHE 130,131,132,133,134, and 135	12 hrs.
Organic Chemistry with lab	CHE 230,231,232,233,234, and 235	6 hrs.
Biochemistry	CHE 340	4 hrs.
Physics	PHY 151, 152, 153	9 hrs.
Calculus	MATH 147 or MATH 150	4 hrs.
Microbiology	BIO 210	4 hrs.
Statistics	Multiple options available	4 hrs.
Psychology	Multiple options available	4 hrs.
English Composition	WRD 103, 104	9 hrs.
<i>Total Hours</i>		<b>76 hrs.</b>

Students enrolled at **Elmhurst College** must successfully complete the following courses listed below with a grade of “C” or higher:

Requirement	Undergraduate Course	Minimum Semester Hours
Biology with lab	BIO 200, 201	8 hrs.
Anatomy*	BIO 207	3 hrs.
Physiology*	BIO 208	3 hrs.
General/Inorganic Chemistry with labs	CHM 211, 212	8 hrs.
Organic Chemistry with lab	CHM 311	4 hrs.
Biochemistry	CHM 315	3 hrs.
Physics	PHY 121 or 111, 122 or 112	6 hrs.
Calculus	MTH 151	3 hrs.
Microbiology	BIO 221 or 321	3 hrs.
Statistics	MTH 345 or 346, or PSY 355	3 hrs.
Psychology	Any Psychology course (other than PSY 355)	3 hrs.



English Composition	ENG 105, 106	6 hrs.
<i>Total Hours</i>		<b>53 hrs.</b>

### **Articulation Agreement with Benedictine University's Master of Science in Integrative Physiology Program**

CCO will offer guaranteed interviews to students enrolled in Benedictine University's Master of Science in Integrative Physiology (M.S.I.P.) Program who apply as a traditional applicant to CCO and who satisfy these requirements:

1. Must meet all admission requirements of CCO.
2. Must submit a completed application to OptomCAS by April 1 for enrollment at CCO in Fall Quarter immediately following the completion of the M.S.I.P. Program.
3. Have an M.S.I.P. program GPA of at least 3.5 (out of 4.0) at the time of application to CCO.
4. Have completed all courses in the M.S.I.P. Program with a minimum grade of C (not C-) or higher.
5. Have a cumulative GPA of 3.2 or higher, including courses taken before and during the M.S.I.P. Program.
6. Provide OAT scores showing a Minimum Academic Average and Total Science scores of 300 each. OAT test scores must be earned no more than 5 years prior to the planned enrollment year.
7. Submit two letters of recommendation. One letter must be from a practicing optometrist. The other letter must be from the Director of the M.S.I.P. Program.
8. Demonstrate a good understanding of optometric medicine. Candidates are strongly encouraged to shadow and observe a number of practicing optometrists in the clinical setting.
9. Demonstrate a commitment to service through extracurricular and/or community activities.

### **Articulation Agreement with DePaul University's Pathway Honors Program**

CCO will offer guaranteed interviews to students enrolled in DePaul University's Pathway Honors program who apply as a traditional applicant to CCO and who satisfy these requirements:

1. Must meet all admissions requirements of CCO
2. Must submit a completed application to OptomCAS by April 1 for enrollment at CCO in the Fall Quarter immediately following the completion of the baccalaureate degree at DePaul.
3. Have a cumulative GPA of 3.5 or higher (for all courses) at the time of application to Midwestern University.

4. Have no final course grade less than a "C" in the Pathways Honors program.
5. Complete the Optometry Admission Test (OAT) within the last 5 years with minimum Academic Average and Total Science scores of 300.
6. Submit two letters of recommendation. One must be from a practicing optometrist.
7. Demonstrate good understanding of optometric medicine. Candidates are strongly encouraged to shadow and observe a number of practicing optometrists in the clinical setting.
8. Demonstrate a commitment to service through extracurricular and/or community activities.

### **Reapplication Process**

After receiving either denial or end-of-cycle letters, applicants may reapply for the next enrollment cycle. Before reapplying, however, applicants should seek the advice of a MWU admissions counselor.

### **Transfer Admission Policy**

CCO may elect to accept transfer students from other U.S. accredited schools of optometry who are currently enrolled, are in good academic standing, have no ethics or professionalism violations, and provide acceptable reason(s) for seeking transfer. These transfer students must satisfy the minimum qualifications for admissions as all other applicants to the CCO program. Typically, students will transfer at the beginning of the second year of the curriculum.

Students requesting transfers must meet the College's general requirements for admission. They must also submit the following:

1. A letter to the Director of Admissions outlining the reasons for requesting transfer and explaining any difficulties encountered at the previous institutions
2. Course syllabi for all optometry coursework for which advanced standing credit is requested
3. Official admission test scores from any one of the following: OAT, MCAT, DAT, PCAT, or GRE
4. Official transcripts from all schools attended - undergraduate, graduate, and professional
5. A letter from the dean of the college in which the student is enrolled that describes current academic status and terms of withdrawal or dismissal
6. Additional documents or letters of recommendation as determined necessary by the Director of Admissions or Dean

Following receipt of these materials, a decision by the Dean is made regarding whether or not the student merits an on-campus interview. If the student receives an invitation, he/she interviews with an appropriate interview team. The interview team then makes an admissions recommendation to the Dean, who is responsible for approving both the student's admissions status and class standing.

The transfer application must be received sufficiently early to allow for processing of the application, interview, and moving of the student prior to the start of the next academic term.

### **Readmission After Dismissal for Poor Academic Performance**

Students dismissed for poor academic performance may reapply for admission to CCO if they:

- Seek academic counseling from the Office of the Dean prior to enrolling in an advanced health-related curriculum;
- Complete at least two semesters or three quarters of full-time study (i.e., at least 15 credit hours per semester or quarter) of a curriculum at the advanced level at a regionally accredited U.S. college or university;
- Earn grades of at least C (not C-) in all courses taken;
- Maintain a cumulative GPA of 2.50 or better.

Students fulfilling these requirements will be permitted to reapply to the University and CCO. Students should obtain their applications from the Office of the Dean and not through OptomCAS. Completed readmission applications must be submitted by May 15th to the Office of the Dean. The completed application will be forwarded to the Admissions Committee for review and recommendation. Committee recommendations are forwarded to the Dean for final action.

No guarantee of admission is implied, and questions related to advanced standing and similar issues will be addressed as they are for new applicants. Readmission will be granted only once.

## **GRADUATION REQUIREMENTS**

To be eligible for graduation and to receive the degree Doctor of Optometry (O.D.), the student must meet the following requirements:

- Follow an approved course of study acceptable to the College's Student Promotion and Graduation Committee and leading to the completion of all academic requirements for the degree;
- Complete all academic requirements with passing grades and earn a cumulative GPA of at least 2.00;
- Provide proof of passing Part I of the National Boards administered by the National Board of Examiners in Optometry (NBEO). It is the responsibility of the individual student to pass any national board examination;
- Provide proof of taking either Part II of the National Boards administered by the NBEO or the

Written Assessment portion of the Canadian Examiners in Optometry (CEO) Canadian Assessment of Competency in Optometry (CACO) examination;

- Submit proof of passage of Part I of the National Boards plus proof of the taking of Part II of the National Boards administered by NBEO or the Written Assessment portion of the CACO examination to the Office of the Dean by February 1st of the year of graduation in order to be eligible to walk-through and participate in the graduation ceremony with their class and receive a diploma;
- Be recommended for conferral of the degree Doctor of Optometry by the University Faculty Senate;
- Settle all financial accounts with the University;
- Complete all graduation clearance requirements as instructed by the Office of the Registrar.

In the event that a student does not pass Part I of the National Boards, the student may continue in the program. However, a student must pass Part I of the National Boards in order to graduate.

If a student is scheduled to take Part I of the National Boards in March or August of the year of graduation, the student is eligible to walk through and participate in the graduation ceremony with their class, but will not receive a diploma until documentation is provided to show passage of Part I of the National Boards.

## **LICENSURE REQUIREMENTS**

To obtain licensure, graduates must have completed the requirements established by each state or national licensing board. Licenses require successful passage of a country's national board examinations and may require the passage of additional state licensing exams. Postdoctoral requirements may vary among US states. The National Board of Examiners in Optometry (NBEO) administers complete integrated examinations in three parts that reflect the different stages of a candidate's optometric education and training. The earliest date for a student candidate to take the Part I examination is March of the third professional year at an accredited institution. The earliest date for a candidate to take the Part II examination is in December during the candidate's fourth year at an accredited institution. Students are eligible to take the Part III examination at the conclusion of their third year or at any time throughout their fourth year.

Students intending to practice in Canada must seek a Certificate of Competence in Optometry. This requires that they take and pass the Canadian Assessment of Competency in Optometry (CACO) examination which has Written and Practical (clinical skills) Assessments. A candidate is not eligible for registration for the spring or fall exam administration until they are enrolled in their final year of an optometry program. Candidates registering for a spring

administration must graduate with an OD degree on or before June 30th following that administration. Candidates registering for a fall administration must graduate with an OD degree on or before November 30th following that administration.

It is the responsibility of the individual student to pass national board examinations. For additional information regarding licensure, contact the following agencies:

National Board of Examiners in Optometry  
200 S. College Street, #2010  
Charlotte, NC 28202  
Phone: 800-969-EXAM (3926) or 704-332-9565  
Fax: 704-332-9568  
E-mail: nbeo@optometry.org  
Website: www.optometry.org

or:

Optometry Examining Board of Canada  
37 Sandiford Drive, Suite 403  
Stouffville, Ontario  
L4A 3Z2  
Phone: 905-642-1373  
Fax: 905-642-3786  
E-mail: exams@oebc.ca  
Website: http://www.oebc.ca

Midwestern University's Doctor of Optometry meets the educational requirements for licensure to practice as an optometrist in the following states and territories: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, U.S. Virgin Islands, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

Each student should check the additional licensure requirements for the state, district, or territory in which they intend to pursue employment.

*Special Note:* Licensure in Oklahoma requires that you must have passed the Laser Therapy for the Anterior Segment Course offered by the Northeastern State University.

## CURRICULUM

*The College reserves the right to alter the curriculum as it deems appropriate.*

### First Year

Total Quarter Credit Hours Required: 54.5

### Fall Quarter

CORED	1599K	Interprofessional Education I	1
OPTOD	1510	Clinical Optometry I	3.5
OPTOD	1511	Contemporary Issues in Healthcare & Ethics	1
OPTOD	1540	Geometrical Optics	4
OPTOD	1561	Ocular Anatomy and Physiology I	3.5
PATHD	1501	Pathology/Histology I	2
PHYSD	1530	Human Physiology I	3.5

**Total 18.5**

### Winter Quarter

ANATD	1504	Gross Anatomy	3.5
MICRD	1590	Immunology	2
OPTOD	1500	IPE: Healthcare Communication	1
OPTOD	1520	Clinical Optometry II	3
OPTOD	1541	Physiological Optics	4
OPTOD	1562	Ocular Anatomy and Physiology II	2
PHYSD	1531	Human Physiology II	3.5

**Total 19**

### Spring Quarter

BI OCD	1590	Biochemistry for Optometry	1.5
MICRD	1582	Microbiology	1.5
OPTOD	1514	Optometry Business Management I	1
OPTOD	1522	Visual Perception	2
OPTOD	1530	Clinical Optometry III	3
OPTOD	1543	Visual Optics	2
OPTOD	1550	Visual Neuroanatomy & Visual Neurophysiology	3.5
PATHD	1502	Pathology/Histology II	2.5

**Total 17**

**Second Year**

Total Quarter Credit Hours Required: 56

**Fall Quarter**

OPTOD 1620	Basic Binocular Function	3
OPTOD 1630	Ocular Disease I	3
OPTOD 1635	Ocular Therapeutics I	1
OPTOD 1640	Clinical Optometry IV	3
OPTOD 1643	Ophthalmic Optics I	4
OPTOD 1680	Capstone Project: Research Design, Biostatistics & Literature Search	1
PHARD 1641	Pharmacology I	3
<b>Total</b>		<b>18</b>

**Winter Quarter**

CORED 1699K	Interprofessional Education II	1
OPTOD 1621	Ocular Motility	2
OPTOD 1631	Ocular Disease II	3
OPTOD 1636	Ocular Therapeutics II	1
OPTOD 1644	Ophthalmic Optics II	4
OPTOD 1648	Contact Lens I	3
OPTOD 1650	Clinical Optometry V	3
OPTOD 1681	Capstone Project: Study Design	1
PHARD 1642	Pharmacology II	2
<b>Total</b>		<b>20</b>

**Spring Quarter**

OPTOD 1623	Diagnosis and Management of Non-Strabismic Binocular Vision Disorders	4
OPTOD 1632	Ocular Disease III	3
OPTOD 1633	Surgical Management of the Eyelid & Ocular Adnexa	1.5
OPTOD 1637	Ocular Therapeutics III	3
OPTOD 1649	Contact Lens II	3
OPTOD 1660	Clinical Optometry VI	3
OPTOD 1661	Clinical Services Proficiency	0.5
<b>Total</b>		<b>18</b>

**Third Year**

Total Quarter Credit Hours Required: 67

**Summer Quarter**

OPTOD 1700	Clinical Medicine Procedures	2.5
OPTOD 1724	Pediatric Optometry	2.5
OPTOD 1733	Ocular Disease IV	2.5
OPTOD 1750	Contact Lens III	3
OPTOD 1770	Clinical Services I	6
OPTOD 1787	Neuro-ophthalmic Disease	2
<b>Total</b>		<b>18.5</b>

**Fall Quarter**

OPTOD 1714	Optometry Business Management II	2
OPTOD 1725	Diagnosis of Strabismus & Amblyopia	3.5
OPTOD 1734	Ocular Disease V	2
OPTOD 1745	Epidemiology, Public Health & the Optometric Profession	2
OPTOD 1771	Clinical Services II	6
OPTOD 1778	Capstone Project: Data Collection & Analysis	1
OPTOD 1790	Clinical Case Analysis I/Evidence-Based Medicine	2
<b>Total</b>		<b>18.5</b>

**Winter Quarter**

OPTOD 1701	Behavioral Medicine	1
OPTOD 1726	Treatment & Management of Strabismus & Amblyopia	2.5
OPTOD 1735	Advanced Specialized Test Interpretation	1
OPTOD 1772	Clinical Services III	6
OPTOD 1774	Specialty Clinical Services Proficiency	0.5
OPTOD 1785	Low Vision Rehabilitation	3
OPTOD 1791	Clinical Case Analysis II/Treatment Plans	2
<b>Total</b>		<b>16</b>

**Spring Quarter**

OPTOD 1715	Optometry Business Management III	2
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OPTOD 1727	Visual Information Processing & Learning-Related Vision Problems	3
OPTOD 1736	Ophthalmic Application of Lasers	1
OPTOD 1773	Clinical Services IV	6
OPTOD 1779	Capstone Project: Dissemination of Results	2
<b>Total</b>		<b>14</b>

#### Fourth Year

Total Quarter Credit Hours Required: 72

#### Summer Quarter

OPTOD 1800	Clinical Services V	18
<b>Total</b>		<b>18</b>

#### Fall Quarter

OPTOD 1810	Clinical Services VI	18
<b>Total</b>		<b>18</b>

#### Winter Quarter

OPTOD 1820	Clinical Services VII	18
<b>Total</b>		<b>18</b>

#### Spring Quarter

OPTOD 1830	Clinical Services VIII	18
<b>Total</b>		<b>18</b>

During their enrollment at CCO, students may be required or may choose to take specific courses that enhance skills or elective courses for enrichment. No minimum number of these course credits is required for graduation. Options may include, but are not limited to, the following:

#### Professional Electives

OPTOD 1401-11	Research	Each course 1-4
OPTOD 1582-5	Optometry Competency	Each course 1-12
OPTOD 1682-5	Selected Studies	Each course 1-3
OPTOD 1760	Study Skills Enhancement	2
OPTOD 1761	Applied Basic Science Review	1-3

OPTOD 1792	Ocular Nutrition	1
OPTOD 1793-6	Third Year Clinical Skills Enhancement	Each course 1-7.5
OPTOD 1797	Spanish for Optometric Eye Exams	1.5
OPTOD 1798	Introduction to Sports Vision	0.5
OPTOD 1799	Neuro-Optometric Rehabilitation	1
OPTOD 1894-7	Fourth Year Clinical Skills Enhancement	Each course 1-18

## COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

#### *ANATD 1504 Gross Anatomy*

This course provides fundamental knowledge of normal human structure and function through lectures and guided laboratory activities. Students are given an overview of the entire human body, with an emphasis on head and neck anatomy in the laboratory activities. Three-dimensional relationships on head and neck structures are reinforced by reviewing prosected cadaver specimens, images, and models. 3.5 credits

#### *BIOCD 1590 Biochemistry for Optometry*

This course focuses on the structure function relationships of the eye in regard to biomolecules, metabolism, and cell biology. 1.5 credits

#### *CORED 1500K IPE: Healthcare Communication*

This course will introduce first year optometry, dental, pharmacy, and medical students to the fundamental principles of effective communication in the health care setting. The course emphasizes the principles and elements of interpersonal, nonverbal, motivational communication, barriers to effective communication, including cultural awareness. 1 credit

#### *CORED 1599K Interprofessional Education I*

Changes in our healthcare delivery system are creating a growing demand for health professionals with skills in collaboration and teamwork. This course will describe the roles and responsibilities of the various healthcare disciplines. It will also provide students, from different health professions, the opportunity to interact with one another as

well as simulated patients. This collaboration will promote communication using a team-based approach to the maintenance of health and management of disease.

1 credit

#### *CORED 1699K Interprofessional Education II*

This course will provide students, working in interprofessional teams, opportunities to learn and provide integrated, patient-centered care in the development of therapeutic care plans using a team-based approach. Active learning techniques, interprofessional learning, and clinical simulation will be used to enhance the education of learners to effectively engage in problem solving and communication activities that address current health related issues in the care of humans, animals, and the environment.

1 credit

Prerequisites: CORED 1599K Interprofessional Education I

#### *MICRD 1582 Microbiology*

This course is designed to provide a basic knowledge of clinical microbiology so that students can understand the interaction between the host and pathogenic microorganisms. Emphases include the rational management, prevention, and control of infectious diseases.

1.5 credits

#### *MICRD 1590 Immunology*

This course presents basic aspects of the body's defense mechanisms. Current advances in immunotherapy and immunoprophylaxis are emphasized. The role the immune system plays in rejection of organ transplants, autoimmunity, and hypersensitivity are also discussed.

2 credits

#### *OPTOD 1500 IPE: Healthcare Communication*

This course will introduce first year optometry, dental, pharmacy, and medical students to the fundamental principles of effective communication in the health care setting. The course emphasizes the principles and elements of interpersonal, nonverbal, motivational communication, barriers to effective communication, including cultural awareness.

1 credit

#### *OPTOD 1510, 1520, 1530 Clinical Optometry I, II, III*

These courses are the first three in the Clinical Optometry sequence introducing the theory and procedures of comprehensive eye examinations. This includes instrumentation, examination methods and protocols, psychophysical techniques, appropriate patient communication, and recording of findings of various examination techniques commonly used in preliminary testing and visual function. Students are introduced to and

participate in patient care and community vision screening during this sequence.

- Prerequisite for OPTOD 1510 Clinical Optometry I, 3.5 credits: none
- Prerequisite for OPTOD 1520 Clinical Optometry II, 3 credits: OPTOD 1510 Clinical Optometry I
- Prerequisite for OPTOD 1530 Clinical Optometry III, 3 credits: OPTOD 1520 Clinical Optometry II

#### *OPTOD 1511 Contemporary Issues in Healthcare & Ethics*

This course introduces students to ethical theories and principles and how to apply them to situations they may encounter in healthcare. Students will learn about ethical issues involving topics such as technology, confidentiality, and professional relationships. Ethical standards expected of them as graduate students and as optometrists will be discussed.

1 credit

#### *OPTOD 1514 Optometry Business Management I*

This course surveys the profession of optometry up to present day, provides basic planning strategies for personal, professional, and financial goals to prepare for a career in optometry. Optometric career choices, modes and scope of optometric practice, as well as the advantages and disadvantages of the various paths are discussed. Emphasis is placed on the steps that should be initiated to prepare for a career as a professional.

1 credit

#### *OPTOD 1522 Visual Perception*

This course presents the basis of visual processing. It includes light and dark adaptation, form and motion perception, other spatial and temporal aspects of vision, and color vision. Students will learn about striate and extra-striate cortex, and also gross electrical potentials. This will help students to understand different electrodiagnostic and imaging techniques such as visual evoked potentials (VEP) and MRI. Furthermore, they will learn about different psychophysical methods (e.g., signal detection theory). In addition, an overview of human visual development will also be discussed.

2 credits

#### *OPTOD 1540 Geometrical Optics*

The course provides an introduction to the conceptual and quantitative characterization of the behavior of light by using the geometrical model. In Geometrical Optics, the basics of refraction, reflection, image formation, and magnification will be presented. Applications of these concepts on plane interfaces, spherical and spherocylindrical thin lenses, thick lenses, prisms, mirrors, and simple compound optical systems (telescopes and microscopes) will be presented. Also, the ray

transfer matrix analysis will be introduced.  
4 credits

#### *OPTOD 1541 Physiological Optics*

The course applies the concepts learned during Geometrical Optics to study the eye as an optical system, providing a qualitative background for the clinical practice. Schematic eye models, optics of ametropias and their correction, higher order aberrations, prescription writing, accommodation, eye's magnification, classification of refractive errors, and clinical instruments are discussed. A brief introduction to radiometry and photometry is also part of this course.

4 credits

Prerequisite: OPTOD 1540 Geometrical Optics

#### *OPTOD 1543 Visual Optics*

The course expands beyond the geometrical model of light by providing the basis of the electromagnetic and the quantum optical models and applies them to the study of vision related phenomena. Visual Optics provides conceptual and quantitative understanding of the characteristics and applications of the electromagnetic theory of light: polarization, diffraction, interference, scattering, and colorimetry. It also provides an introduction to the quantum theory of light that is applied to explain fluorescence and laser phenomenology.

2 credits

#### *OPTOD 1550 Visual Neuroanatomy & Visual Neurophysiology*

This course presents an introduction to neuroanatomy and neurophysiology from a visual perspective. Discussion of the central nervous system, peripheral nervous system, and specific visual pathway information from low order to high order processing are included. Students will learn how to apply their neuroanatomy and neurophysiology knowledge to dysfunctions and diseases of nervous system pathways.

3.5 credits

#### *OPTOD 1561, 1562 Ocular Anatomy & Physiology I, II*

This course sequence enters into detailed discussion of microscopic and gross ocular anatomy. It describes the physiology and pathophysiology of the ocular tissues and units of the eye. Students will gain an understanding of the interrelationships between ocular histology and physiology with pharmacology and pathophysiology.

- Prerequisite for OPTOD 1561 Ocular Anatomy & Physiology I, 3.5 credits: none
- Prerequisite for OPTOD 1562 Ocular Anatomy & Physiology II, 2 credits: OPTOD 1561 Ocular Anatomy & Physiology I

#### *OPTOD 1620 Basic Binocular Function*

This course will present an overview of basic concepts of binocular vision such as the geometry of the binocular projection, the concepts of fusion, binocular summation, retinal correspondence, the horopter, stereopsis, fixation disparity, rivalry and aniseikonia. These concepts will be helpful to understand binocular vision related issues such as convergence insufficiency (CI).

3 credits

#### *OPTOD 1621 Ocular Motility*

This course discusses the functional classes of eye movements including, fixational, saccadic, pursuit, vestibular, optokinetic, and vergence. Neural anatomy and physiology of eye movements will be discussed as well as systems governing accommodation and pupillary responses corresponding to eye movements. Students will learn how disruptions in the neural or muscular systems may lead to clinically significant disorders such as nystagmus, strabismus, and other abnormal eye movements.

2 credits

#### *OPTOD 1623 Diagnosis and Management of Non-Strabismic Binocular Vision Disorders*

The course will present the diagnosis and management of heterophoric, accommodative, and eye movement disorders. Advanced clinical testing and interpretation of findings will be discussed for proper diagnosis of these conditions. Students will gain an understanding of different treatment options including lenses, prisms, and vision therapy. Additionally, optometric therapies for enhancement of sports-related visual skills will also be introduced.

4 credits

#### *OPTOD 1630, 1631, 1632, 1733, 1734 Ocular Disease I, II, III, IV, V*

This course sequence covers signs and symptoms, pathophysiology, clinical course, differential diagnosis, treatment, and management of ocular diseases of the anterior and posterior segment of the eye and ocular adnexa.

- Prerequisite for OPTOD 1630 Ocular Disease I, 3 credits: none
- Prerequisite for OPTOD 1631 Ocular Disease II, 3 credits: OPTOD 1630 Ocular Disease I
- Prerequisite for OPTOD 1632 Ocular Disease III, 3 credits: OPTOD 1631 Ocular Disease II
- Prerequisite for OPTOD 1733 Ocular Disease IV, 2.5 credits: OPTOD 1632 Ocular Disease III
- Prerequisite for OPTOD 1734 Ocular Disease V, 2 credits: OPTOD 1733 Ocular Disease IV

*OPTOD 1633 Surgical Management of the Eyelid & Ocular Adnexa*

This course prepares the optometry student to perform ophthalmic surgical procedures of the anterior segment of the eye (biopsy, chalazion injections, incisions, and curettage). Topics will include pertinent medical-legal issues and informed consent, pharmacology of local anesthesia, surgical instruments, emergency surgical procedures, asepsis, infection control, and biohazard disposal. Post-operative wound care and complications will also be discussed.

1.5 credits

Prerequisites: OPTOD 1562 Ocular Anatomy & Physiology II and OPTOD 1630 Ocular Disease I

*OPTOD 1635, 1636, 1637 Ocular Therapeutics I, II, III*

This course sequence focuses on the pharmacology of diagnostic and therapeutic agents. Specific topics include pharmacokinetics of the eye, use of autonomic agents, anti-allergic, anti-inflammatory and anti-infectious agents, and agents used to treat glaucoma. In addition, ocular effects of systemic medications will be presented.

- Prerequisite for OPTOD 1635 Ocular Therapeutics I, 1 credit: none
- Prerequisite for OPTOD 1636 Ocular Therapeutics II, 1 credit: OPTOD 1635 Ocular Therapeutics I
- Prerequisite for OPTOD 1637 Ocular Therapeutics III, 3 credits: OPTOD 1636 Ocular Therapeutics II

*OPTOD 1640, 1650, 1660 Clinical Optometry IV, V, VI*

These courses are the last three in the Clinical Optometry sequence introducing theory and procedures of comprehensive eye examinations. This includes instrumentation, examination methods and protocols, psychophysical techniques, appropriate patient communication, and recording of various examination techniques regarding ocular health. Students participate in patient care and community vision screening during this sequence.

Each course 3 credits

- Prerequisite for OPTOD 1640 Clinical Optometry IV: OPTOD 1530 Clinical Optometry III
- Prerequisite for OPTOD 1650 Clinical Optometry V: OPTOD 1640 Clinical Optometry IV
- Prerequisite for OPTOD 1660 Clinical Optometry VI: OPTOD 1650 Clinical Optometry V

*OPTOD 1643, 1644 Ophthalmic Optics I, II*

This course sequence covers the study of the physical and optical characteristics of ophthalmic lenses and prisms; the design and application of single vision, multifocal, occupational and progressive lenses; the benefits and applications of ophthalmic lens materials, absorptive lenses,

and lens treatments; and the proper measurement and fitting of ophthalmic lenses and frames.

Each course 4 credits

- Prerequisite for OPTOD 1643 Ophthalmic Optics I: OPTOD 1543 Visual Optics
- Prerequisite for OPTOD 1644 Ophthalmic Optics II: OPTOD 1643 Ophthalmic Optics I

*OPTOD 1648, 1649, 1750 Contact Lens I, II, III*

This course sequence includes a discussion of the theory and practice of contact lens design and contact lens fitting methodologies. Areas of discussion include corneal topography, design of materials, fabrication and modification of contact lenses, fitting and evaluation methodologies, and procedures. This course sequence will also explore advanced contact lens applications for high and irregular astigmatism, keratoconus, presbyopia, post-surgical and irregular corneas, corneal reshaping, and ocular prosthetics.

Each course 3 credits

- Prerequisite for OPTOD 1648 Contact Lens I: none
- Prerequisite for OPTOD 1649 Contact Lens II: OPTOD 1648 Contact Lens I
- Prerequisite for OPTOD 1750 Contact Lens III: OPTOD 1649 Contact Lens II

*OPTOD 1661 Clinical Services Proficiency*

The objective of this course is to assess and verify the student's level of competency in patient care skills. The course is designed to refine clinical procedures and culminates in a comprehensive clinical skills proficiency examination.

0.5 credits

Prerequisite: OPTOD 1650 Clinical Optometry V

*OPTOD 1680 Capstone Project: Research Design, Biostatistics & Literature Search*

The intent of this course is to prepare students to conduct the Capstone Research Project. This course covers the principles of research design, application of biostatistical methods, and literature search tools. The students will learn basic rules and common practices for planning, conducting, and completing a basic or clinical research study.

1 credit

*OPTOD 1681 Capstone Project: Study Design*

The intent of this course is to guide students through the study-design phase of the project. This course will include conducting a literature search(es) and designing the Capstone Project. The Capstone projects can be focused on basic research, clinical research, or literature reviews. If an extensive literature review is proposed for the Capstone project, prior



approval from the Capstone Committee is required.  
1 credit

*OPTOD 1700 Clinical Medicine Procedures*

The benefits of an interdisciplinary approach to vision care are emphasized in this course. It involves advanced history taking and aspects of a physical examination. This course introduces the procedures for evaluating the head and neck, while covering various systems of the body (dermatology, pulmonology, rheumatology, and neurology). Suturing, wound maintenance, and injections (ocular, subcutaneous, intramuscular, and intravenous) are also included.  
2.5 credits

*OPTOD 1701 Behavioral Medicine*

This course provides an introduction to behavioral and psychiatric disorders and behavioral medicine. The course is offered from a holistic perspective with an emphasis on compassionate inter-professional and optometric care. In addition, medical treatment is discussed with a basic overview of potential optometric drug interactions and side effects relevant to optometry and with reference to the One Health Initiative.  
1 credit

*OPTOD 1714 Optometry Business Management II*

This course emphasizes interpersonal skills and professionalism as part of patient care. Ethical considerations of professional practice are discussed. Using the Eye Institute as the “practice model”, doctor/patient communication methods and protocols as well as essential practice management procedures will be developed. Additionally, clinico-legal aspects of patient care, record keeping, coding and billing, and documentation are discussed.  
2 credits

*OPTOD 1715 Optometry Business Management III*

This course is designed to provide the educational information and exercises that facilitate the learning of knowledge and skills necessary to enter a desired mode of practice. The students will be educated on the numerous options available to them and be able to choose the most beneficial to their personal situation. Post-graduation job securing strategies, contract negotiation considerations, and business plan design and creation are covered in this course. The desired outcome is that the student will be able to enter their best practice situation upon graduation.  
2 credits

*OPTOD 1724 Pediatric Optometry*

This course focuses on the adaptation of eye care for the pediatric and special needs patient including examination techniques, treatment, and management. Normal visual development will be discussed as well as the potential

implications of congenital and genetic disorders on the visual system. Ocular pathologies affecting these populations including diagnostic procedures and appropriate treatment strategies will also be addressed.

2.5 credits

Prerequisite: OPTOD 1623 Diagnosis and Management of Non-Strabismic Binocular Vision Disorders

*OPTOD 1725 Diagnosis of Strabismus & Amblyopia*

This course introduces strabismus and amblyopia, including appropriate testing and diagnosis. Clinical classifications and characteristics of strabismus and amblyopia will be discussed. Emphasis will be placed on the clinical interpretation of findings and specialized techniques necessary for proper evaluation.

3.5 credits

Prerequisite: OPTOD 1724 Pediatric Optometry

*OPTOD 1726 Treatment & Management of Strabismus & Amblyopia*

This course introduces clinical applications for the prevention, treatment, and management of strabismus and amblyopia. It presents clinical methods to ameliorate deficits in visual development and binocular functions caused by sensory and motor anomalies. Theory and reasoning for treatment and management will be discussed.

2.5 credits

Prerequisite: OPTOD 1725 Diagnosis of Strabismus & Amblyopia

*OPTOD 1727 Visual Information Processing & Learning-Related Vision Problems*

This course focuses on visual information processing testing and its use in identifying reading and learning deficits. Application of these findings will be discussed with respect to an academic environment including the optometrist’s role as part of an interprofessional team and management of learning disorders. Time will be spent introducing the optometrist’s role in testing brain injuries and the associated visual therapy.

3 credits

Prerequisite: OPTOD 1726 Treatment & Management of Strabismus & Amblyopia

*OPTOD 1735 Advanced Specialized Test Interpretation*

This course is designed to augment the basic education on specialty test indications and their results. This course will explore image acquisition, interpretation, clinical correlates, and their application to patient care.

1 credit

*OPTOD 1736 Ophthalmic Application of Lasers*

This course is a comprehensive introduction to the ophthalmic application of lasers. Topics will include indications, perioperative management, complications, and

patient education for laser vision correction and therapeutic medical lasers, as well as pertinent medical-legal issues and informed consent. Physical principles of lasers, mechanisms of damage, and American National Standards Institute standards pertaining to laser safety will also be included. Hands-on learning will be incorporated throughout lab exercises.

1 credit

*OPTOD 1745 Epidemiology, Public Health & the Optometric Profession*

This course is an introduction to the epidemiology of ocular anomalies, public and community health planning and care, and the role of the optometrist in community health promotion.

2 credits

*OPTOD 1770, 1771, 1772, 1773 Clinical Services I, II, III, IV*

The student will provide primary eye care services in the Primary Care and Specialty Services (cornea and contact lenses, ocular disease, pediatric optometry, low vision rehabilitation, vision therapy, sports vision, and ocular prosthetics) at the Midwestern University Eye Institute or at selected external clinical sites. This course series focuses on progressive competence in the diagnosis, treatment and management of visual dysfunctions and ocular conditions. Students will participate in case based clinical seminars as well.

Each course 6 credits

- Prerequisites for OPTOD 1770 Clinical Services I: OPTOD 1660 Clinical Optometry VI and OPTOD 1661 Clinical Services Proficiency
- Prerequisite for OPTOD 1771 Clinical Services II: OPTOD 1770 Clinical Services I
- Prerequisite for OPTOD 1772 Clinical Services III: OPTOD 1771 Clinical Services II
- Prerequisites for OPTOD 1773 Clinical Services IV: OPTOD 1772 Clinical Services III and OPTOD 1774 Specialty Clinical Services Proficiency

*OPTOD 1774 Specialty Clinical Services Proficiency*

The objective of this course is to assess and verify the student's proficiency in specialty services skills required for clinical rotations during the fourth year of professional patient care. It culminates in a clinical skills proficiency examination.

0.5 credits

Prerequisite: OPTOD 1771 Clinical Services II

*OPTOD 1778 Capstone Project: Data Collection & Analysis*

The intent of this course is to guide students through the data collection and the initial analysis phase of the project. Students will complete their data collection and perform statistical data analysis on their results. At the end of this course, students will be required to prepare an abstract summarizing their data.

1 credit

*OPTOD 1779 Capstone Project: Dissemination of Results*

The intent of this course is to provide guidance to the students for the organization and presentation of the results of their projects. In this final course of the Capstone Project series, students will be required to prepare their project for presentation. Students will create and formally present a poster at the Midwestern University Kenneth Suarez Research day or a similar event.

2 credits

*OPTOD 1785 Low Vision Rehabilitation*

This course provides an overview of the strategies used in the field of low vision rehabilitation to manage and treat patients with chronic vision impairments. Skills necessary to perform basic low vision examinations will be reviewed. Common optical, non-optical, and assistive/adaptive technologies used to develop rehabilitation plans will be introduced. Special topics including geriatric populations, traumatic brain injury, and psychosocial factors associated with vision loss will be discussed. The laboratory component will provide hands-on experience with low vision devices.

3 credits

*OPTOD 1787 Neuro-ophthalmic Disease*

This course presents the ocular, visual, systemic and neurologic manifestations of neuro-ophthalmic disorders and disease. The diagnosis and management is presented and includes but is not limited to components of the neuro-ophthalmic exam, neuroimaging and specialty testing.

2 credits

Prerequisite: OPTOD 1550 Visual Neuroanatomy & Visual Neurophysiology

*OPTOD 1790 Clinical Case Analysis I/Evidence-Based Medicine*

This course is based on case presentations from the Midwestern University Eye Institute or from optometric literature. Students will be trained in clinical diagnosis and treatment and management of patients using evidence-based clinical protocols.

2 credits

*OPTOD 1791 Clinical Case Analysis II/Treatment Plans*

This course is based on case presentations from the Midwestern University Eye Institute or from optometric

literature. It will present the diagnostic and treatment strategies for ocular and visual conditions within both primary and specialty care.

2 credits

*OPTOD 1800, 1810, 1820, 1830 Clinical Services V, VI, VII, VIII*

The fourth professional year is designed to promote continued development of the student's emerging clinical problem-solving abilities. This is a series of full-time clinical rotations or externships. Direct patient care in individualized supervised clinical experiences is the focus. Students will provide eye care services in the Primary Care and Specialty Services (cornea and contact lenses, ocular disease, pediatric optometry, low vision rehabilitation, electro-diagnosis, vision therapy, sports vision and ocular prosthetics) at the Midwestern University Eye Institute or at selected external rotation sites. Clinical decision making will be enhanced through challenging patient care problems that highlight or emphasize differential diagnosis, management decisions, referral decisions and follow-up, and newer techniques and procedures for diagnosis and management. This course comprises patient care experiences and a seminar series presented weekly during each fourth year clinical rotation in the Eye Institute.

Each course 18 credits

- Prerequisite for OPTOD 1800 Clinical Services V: OPTOD 1774 Clinical Services IV
- Prerequisite for OPTOD 1810 Clinical Services VI: OPTOD 1800 Clinical Services V
- Prerequisite for OPTOD 1820 Clinical Services VII: OPTOD 1810 Clinical Services VI
- Prerequisite for OPTOD 1830 Clinical Services VIII: OPTOD 1820 Clinical Services VII

*PATHD 1501 Pathology/Histology I*

This course focuses on the basic concepts and principles of pathology by analyzing the basic inherent mechanisms that underlie all disease processes. Students will develop an understanding of the processes of cellular injury and adaptation, inflammation and repair, neoplasia, hemodynamic disorders and basic laboratory values and analysis. This course stresses the cellular, genetic, pathophysiologic and molecular alterations which underlie all disease processes and emphasizes their dynamic nature. The histology of different organ systems will be covered looking at both normal and diseased tissues.

2 credits

*PATHD 1502 Pathology/Histology II*

This course is a continuum of PATHD 1501. The causes and pathophysiologic mechanisms of disease pertaining to specific organ systems are emphasized along with their anatomic, histologic and physiologic alterations. The relationships between specific organ system diseases and their systemic implications are also emphasized.

2.5 credits

*PHARD 1641, 1642 Pharmacology I, II*

This course sequence includes coverage of the pharmacologic actions of the major classes of drugs acting on the autonomic, cardiovascular, gastrointestinal, immune and central nervous systems. Other topics that are covered include the chemotherapy of microbial, parasitic and neoplastic diseases; drugs acting on blood and blood-forming organs, hormones and hormone antagonists, principles of toxicology, vitamins, and drugs causing birth defects.

- Prerequisite for PHARD 1641 Pharmacology I, 3 credits: none
- Prerequisite for PHARD 1642 Pharmacology II, 2 credits: PHARD 1641 Pharmacology I

*PHYSD 1530 Human Physiology I*

This course provides core knowledge of physiology in order to understand normal function and to acquire the ability to analyze and interpret the immediate and long-term compensatory responses to common disease states of excitable cells, cardiovascular, and nervous systems. Basic and applied terminology as well as the basic morphology of systems are discussed, and the relationship between anatomy and function of the systems considered is included.

3.5 credits

*PHYSD 1531 Human Physiology II*

This course provides core knowledge of physiology in order to understand normal function and to acquire the ability to analyze and interpret the immediate and long-term compensatory responses to common disease states of excitable cells, cardiovascular, and nervous systems. Basic and applied terminology as well as the basic morphology of systems are discussed, and the relationship between anatomy and function of the systems considered is included.

3.5 credits

## ELECTIVES

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed in a course description, it is implied that there is no prerequisite.

*OPTOD 1401-11 Research*

This course provides an opportunity for optometry students to work with individual faculty mentors on projects of

variable scope. Included activities could be library, laboratory, clinical, and/or survey-type research or other activities agreed on between the student and mentor and approved by the appropriate department chair.  
Each course 1-4 credits

#### *OPTOD 1582-5 Optometry Competency*

These courses serve to enhance the mastery of optometry knowledge, skills, techniques, and concepts. A course in this sequence may be assigned by the Student Promotion and Graduation Committee to a student who has been academically decelerated after receiving a non-passing grade in a required course within the Doctor of Optometry curriculum. The course is assigned for 1- 12 credit hours during the quarter in which the student repeats the failed course. The assigned course will include content previously completed that is deemed critical for success in the Doctor of Optometry curriculum. This is a pass/fail course; letter grades are not assigned. The student who fails to successfully complete the assigned Optometry Competency course will be referred to the Student Promotion and Graduation Committee and may be dismissed from the college.  
Each course 1-12 credits

#### *OPTOD 1682-5 Selected Studies*

This course allows students to pursue their special interests. This may include writing of abstracts or a review of current vision science literature. This may be repeated for credit with permission of the instructor.  
Each course 1-3 credits

#### *OPTOD 1760 Study Skills Enhancement*

This course allows students to understand and apply test-taking strategies in order to increase their success in professional studies.  
2 credits

#### *OPTOD 1761 Applied Basic Science Review*

This is a review course designed to assist students in identifying topic areas that require additional study in preparation for licensing exams.  
1-3 credits

#### *OPTOD 1792 Ocular Nutrition*

This course will provide an overview of the relationship between nutrition, vitamins, minerals and development of healthy vision. It will dive into the role of nutrients and their effect on ocular pathology and ways to incorporate vitamin supplementation in the optometric healthcare setting.  
1 credit

#### *OPTOD 1793-6 Third Year Clinical Skills Enhancement*

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course.

This course may be repeated for credit.  
Each course 1-7.5 credits

#### *OPTOD 1797 Spanish for Optometric Eye Exams*

This course emphasizes the vocabulary associated with the optometric examination. Students are expected to develop basic communication skills in Spanish. This course is intended for students with minimal knowledge of the Spanish language.  
1.5 credits

#### *OPTOD 1798 Introduction to Sports Vision*

This course presents the basics of sports vision evaluation and therapy. The steps involved in performing a comprehensive sports vision examination as well as techniques to evaluate sports-related visual performance will be introduced. Different considerations for sports vision will be discussed, including refractive compensation, prevention and management of ocular injury, assessment and remediation of functional vision inefficiencies, vision enhancement training techniques, and sports vision consultation.  
0.5 credits

#### *OPTOD 1799 Neuro-Optometric Rehabilitation*

This course explores the visual and ocular effects that occur as a result of acquired traumatic brain injury. The mechanism of the neurological and visual presentation following acquired brain injury is discussed, including primary and secondary injury. The course will explore imaging and electrodiagnostics as diagnostic tools and will cover the staging and implementation of various optometric management and treatment rationales with an emphasis on interdisciplinary care.  
1 credit

#### *OPTOD 1894-7 Fourth Year Clinical Skills Enhancement*

Individualized supervised clinical experiences to enhance the examination skills of students are the focus of this course. This course may be repeated for credit.  
Each course 1-18 credits

## STUDENT ACADEMIC POLICIES

The following academic policies apply to all students who matriculate during the academic year of this catalog publication. These policies will apply throughout the entire time a student is enrolled in the college. In the event that these policies need to be revised as the result of new accreditation requirements, mandates of the United States Department of Education, or other unforeseen circumstances, students will be notified in writing prior to the effective date of the new policy.

Faculty and students should also refer to the University Academic Policy section for additional policies that apply to all students at Midwestern University.

### **Student Promotion and Graduation Committee**

The Student Promotion and Graduation Committee (SPGC) is responsible for enforcing the published academic and professional standards established by the faculty and for assuring that they are met by all students enrolled in the program. As such, this Committee establishes the criteria and policies and procedures for student advancement and graduation, as well as academic probation, dismissal, and readmission. This Committee meets at a minimum at the end of each academic quarter to review the academic progress and performance of students enrolled in the program in relation to institutional academic policies. At the end of the academic year, the Committee assesses the academic and professional progress and performance of each student. If the student's progress is satisfactory, the student is promoted to the next academic year, provided all tuition and fees have been paid. Finally, the Committee also identifies and recommends to the MWU Faculty Senate candidates for graduation.

If a student fails to make satisfactory progress in completing the prescribed course of study, the Committee shall take appropriate action to correct the deficiency(ies). In instances involving repeated failures of a student to maintain satisfactory academic/professional progress, the Committee may recommend dismissal.

If a student's academic performance is scheduled for discussion during a Student Promotion and Graduation Committee meeting and the result could change the student's status in the college (extended program or dismissal), then the student will be invited to either appear personally before the Committee or submit a letter or documentation to be presented at the meeting on their behalf. The invited student must indicate, in writing, their intention to appear or provide their materials 24 hours prior to the scheduled meeting to the Assistant/Associate Dean of Academic Affairs. The information will be provided to the Chair and committee members of the SPGC.

Among the options available to the Committee in regard to unsatisfactory student performance are:

1. A written letter of caution provided to the student.
2. That the student
  - be placed on academic probation for a specified period of time,
  - take an alternative approved course offered at another college or university,
  - repeat the course(s) in which there is a failure when the course is offered again in the curriculum,
  - be placed in an extended program,

- require that the student take additional coursework (e.g., OPTOD 1582, 1583, 1584, 1585), or
- be dismissed from the College.

Within two working days following the Committee meeting, the Assistant/Associate Dean is responsible for providing notification in writing with a delivery confirmation (i.e., next-day express mail, e-mail, or hand-delivery) to the involved student, informing him/her of the recommendation of the Committee. The Assistant/Associate Dean is responsible for reviewing all recommendations for consistency with stated College academic policies and practices. The Dean or Assistant/Associate Dean is responsible for providing written notification to all appropriate academic support offices (i.e., Registrar, Student Financial Services, etc.).

### **Academic Standards**

An annual didactic grade point average will be used as the central measure of academic performance. It is calculated from all didactic courses from a particular professional year. Grades earned in courses taken prior to matriculation in the professional program, grades earned for courses taken at another institution while enrolled in the professional program, and grades earned for courses taken at the College in a more advanced professional year than that in which the student is enrolled, are not included in the calculation of this annual grade point average.

Students must maintain an annual grade point average of 2.00 and earn a passing grade in each required course in their professional program to remain in good academic standing.

Students who have an "F/WF" course grade at the end of a quarter must resolve the failure prior to advancing in the program.

Students who have one, two or three "F/WF" grades in a quarter will be reviewed by the Student Promotion and Graduation Committee and will be either dismissed or will be placed in an extended program. The extended program year must take place in the year immediately following and the student will be required to repeat all the courses in which the grades of "F/WF" were received. The student may be required to repeat courses that would serve to enhance the mastery of optometry knowledge, skills techniques, and concepts and that are deemed critical for success in the Doctor of Optometry curriculum. A student is allowed to go through an extended program only once. To be returned to good academic standing, a student must raise his/her annual grade point average to 2.00 or above at the end of the repeat year. Such a student reenters the next professional year curriculum and resumes a full load. A reentering student must achieve a cumulative grade point average of 2.00 at the end of each quarter to continue at CCO.

If the student does not meet the criteria for satisfactory academic performance at the end of the extended program year, he/she will be dismissed.

If a student earns a grade of "F/WF" in one or more required courses, the student is notified, in writing that he/she is being placed on academic probation for their next academic quarter. Probation represents notice that continued inadequate academic performance may result in dismissal from the program and the College. A student placed on academic probation is prohibited from:

1. Holding an office in a class, student association, fraternal, or any other student organization.
2. Participating in off-campus professional meetings and activities beyond program or course requirements during the academic year.

If the student earns an "F/WF" in four or more courses overall, and/ or fails a repeated course, the student will be dismissed from the College. The dismissal is based on the determination by the Committee that the student has not satisfactorily demonstrated that he or she possesses the aptitude to successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program.

A student must complete all courses in an academic year with a "C" grade or better, and a cumulative GPA of 2.00, to progress to the next academic year curriculum.

Academic recommendations are made by the Student Promotion and Graduation Committee to the Associate Dean of Academic Affairs. Students will be notified, in writing, within two working days following the committee meeting regarding the recommendations of the Committee.

The following policies also guide decisions made by the Student Promotion and Graduation Committee:

1. A student must pass all required courses before entering the next year of the professional program.
2. Students placed on an extended program must pass any and all additional required courses assigned by the Student Promotion and Graduation Committee.
3. Students must successfully resolve all "I" (Incomplete) and "IP" (In Progress) grades before beginning external clinical rotations.
4. To proceed with clinical rotations during the fourth professional year, all course requirements for the third professional year must be completed.
5. Students must be in good academic standing to be eligible to take the National Board of Examiners in Optometry (NBEO) or Canadian Examiners in Optometry (CEO) examinations.

6. In the event that a student does not pass NBEO Part I, the student may continue in the program. However, a student must pass NBEO Part I and take NBEO Part II or the Written Assessment portion of the Canadian Examiners in Optometry (CEO) examination to receive a diploma.

### **Appeal of Dismissal or Placement on an Extended Program**

Following notification of a decision for dismissal or placement on an extended program, a student may appeal, in writing, the decision to the Dean. Such appeals must be received by the Dean within three working days after the student is officially notified of the dismissal or deceleration decision. A narrative explaining the basis of the appeal should accompany the request. An appeal must be based on one of the following premises:

1. Bias of one or more Committee members.
2. Material information not available to the Committee at the time of its initial decision.
3. Procedural error.

The Dean will review the appeal request and narrative. If he/she deems that there are sufficient grounds to convene another meeting of the Student Promotion and Graduation Committee, the Dean will request that the committee consider the appeal. If a decision is made to convene a Committee meeting, the student requesting an appeal shall be notified in writing with a delivery confirmation (i.e., e-mail or hand delivery) by the Assistant/Associate Dean at least two working days in advance of the scheduled Committee meeting in which the student's appeal will be heard. The student may request and shall be permitted to appear before the Committee (in person or via telephone) in order to present the basis of the appeal request. In such instances, the student shall inform the Assistant/Associate Dean in writing (i.e., e-mail or hand delivery) of his/her desire to appear before the Committee or his/her intent to waive the right to appear. If the student chooses to appear before the Committee, this prerogative extends to the involved student only and not to any other individuals. The Committee then submits its recommendation to the Dean. Upon receipt of the Committee's recommendation, the Dean makes the final decision, typically within 5 working days.

If the Dean's initial review does not reveal a substantial basis for another SPGC meeting, he/she will rule on the appeal request independently. The Dean makes the final decision, typically within 5 working days.

During the appeal process, the student must continue to attend classes. Students registered in a rotation course may be placed on a mandatory leave of absence until the appeal process is finalized.

## Dismissal

A student may be dismissed from the College for academic reasons upon the recommendation of the Student Promotion and Graduation Committee. The dismissal is based on the determination by the Committee that the student has not satisfactorily demonstrated that he or she possesses the aptitude to successfully achieve the standards and requirements set forth in the academic policies and professional expectations for the program.

## Clinical Rotation Failure (refers to OPTOD 1770, 1771, 1772, 1773, 1800, 1810, 1820, and 1830 Clinical Services I-VIII)

Clinical service courses are completed sequentially.

If a student receives an "F/WF" in a clinical service course, he/she may appeal the failing grade, in writing, to the course director. This must be submitted within two business days after the grade is posted. The course director will act on this appeal and must inform the student, in writing, within 2 business days of this decision. If the appeal is accepted the course director may place the student on an individualized education plan (IEP) under the direction of the course director and may require that the student take coursework. The course director's options are not limited to the above and can be modified on a case-by-case basis. If the course director decides to uphold the "F/WF", the student has the right to follow the appeal process outlined below in Grade Appeals. "F/WF" grades, or those that are upheld through the appeal process will be forwarded to the Student Promotion and Graduation Committee who may exercise any combination of the following sequence:

1. Place the student in an extended program, if eligible.
2. Put the student on a leave of absence to undergo a period of independent study.
3. Require additional coursework or specified activities to enhance optometry knowledge, skills techniques, and concepts that are deemed critical for success as a Doctor of Optometry; and/or demonstrate mastery of the knowledge, skills techniques and concepts deemed critical for success as a Doctor of Optometry.
4. Require the student to repeat the failed clinical rotation.
5. Be dismissed from the program.

## Extended Program

Problems may arise that may necessitate the deceleration of a student's academic course load. Accordingly, an individual's academic course load may be reduced so that the student enters what is termed an extended program or split academic course of study. Such a program rearranges the course schedule so that the normal time period for the program is extended, usually by one additional year. Only enrolled

students may enter an extended program. To enter an extended program, either one or both of the following conditions must be met:

1. Personal hardship. If a student is experiencing unusual stresses in life and an extended academic load could alleviate added stress, the student may petition the College for an extended program. This petition is to be submitted to the Dean or Assistant/Associate Dean of Academic Affairs, in writing, and may not be automatically granted, but may be approved in exceptional circumstances. The Dean or Assistant/Associate Dean is responsible for reviewing and assessing the petition and may forward it to the Student Promotion and Graduation Committee if appropriate. The student will be informed of the decision, in writing, by the Assistant/Associate Dean of Academic Affairs.
2. Academic. As described above, a student ending an academic year with an annual GPA of less than 2.00 may be given the option to repeat courses from that year in which "F" grades were received. A student may be placed on an extended program for academic reasons at the discretion of the Student Promotion and Graduation Committee. A student placed on an extended program for academic reasons is automatically placed on academic probation and may not be returned to good academic standing until the extended program is successfully completed.

If a student is placed on an extended program, such action does not modify or limit the committee's actions for dismissal. Thus, the student may be dismissed for academic reasons while on an extended program.

A student placed on an extended program for academic reasons will be returned to good academic standing when he/she reenters the prescribed academic program and completes all courses that were unsatisfactory and are required for graduation.

A reentering student (after an extended program) must achieve a cumulative grade point average of 2.00 at the end of each quarter to continue at the college. A student is allowed to go through an extended program only once.

## Licensing Board Eligibility Requirements

To be eligible to take any part of the National Board of Examiners in Optometry (NBEO) examination, students must successfully complete all CCO course requirements and meet requirements as established by the Office of the Dean.

## STUDENT ADMINISTRATIVE POLICIES

### **Advanced Standing**

All requests for advanced standing by newly admitted, transfer, or enrolled students are processed on a course-by-course basis by the Student Promotion and Graduation Committee. The Dean's Office provides staff support for such evaluations. To request such consideration, a student should submit a letter of request to the Dean in which the student lists a course(s) previously taken at an accredited college or university which might be similar in content to a professional course(s) that he/she is scheduled to take. The student is advised to provide an official course description(s) and a syllabus (syllabi) of the course(s) previously taken, as well. For some courses, a student may be required to take a comprehensive challenge exam. All requests must be submitted at least three weeks prior to the start of the course being considered. The decision of the committee is forwarded to the Dean as a recommendation to either grant or deny advanced standing. Advanced standing will be considered for coursework taken in which a letter grade of "C" or better has been earned. A "C-" letter grade is not acceptable for advanced standing consideration.

No advanced standing will be awarded for professional coursework completed at a foreign college.

### **Attendance**

Upon acceptance to the College, students are expected to devote their entire efforts to the academic curriculum. The College actively discourages employment that will conflict with a student's ability to perform while didactic courses and externships are in session and will not take outside employment or activities into consideration when scheduling classes, examinations, reviews, field trips, or individual didactic or experiential course functions. Class attendance is mandatory for all students during externship.

### **Class Standing**

To achieve the status of a second-year student in the professional program, students must have successfully completed all requisite first-year courses and earned an annual GPA of 2.00. To achieve the status of a third-year student in the professional program, students must have successfully completed all requisite second-year courses and earned an annual GPA of 2.00. To achieve the status of a fourth-year student in the professional program, students must have successfully completed all requisite third-year courses, and earned an annual GPA of 2.00.

### **Disciplinary Probation**

Disciplinary probation occurs for student acts of professional misconduct as defined in Appendices 2 and 4 of the Midwestern University Student Handbook or as defined in the Eye Institute Manual or the Clinical Rotation Student Clinician and Preceptor Manual. Disciplinary probation is not noted on the transcript but is kept in the student's file. Disciplinary probation information may be shared with clinical sites that are affiliated with Midwestern University educational programs.

### **Grades**

Letter grades corresponding to the level of achievement in each course are assigned based on the results of examinations, required coursework, and, as applicable, other criteria established for each course as follows. Individual faculty have the prerogative to use a plus/minus letter grading system or a whole letter grading system.

Courses are recorded in terms of quarter hour(s) of credit. Multiplication of the credits for a course by the numeric value for the grade awarded gives the number of quality points earned for a course. Dividing the total number of quality points earned in courses by the total number of credits in those courses gives the grade point average.

Grades reported as "W", "W/F", and "P" are recorded on a student's permanent record but are not used in the calculation of a student's grade point average. Similarly, a grade of "I" or "IP" may be assigned and is used only when special/extenuating circumstances exist (e.g., prolonged illness, family crisis, etc.), which prevent a student from completing the necessary course requirements on time in order to receive a grade. "W/F" may be considered a failure by the Student Promotion and Graduation Committee.

If a student receives an "F" grade in a course, that grade will be recorded on his/her transcript. This deficiency may be corrected as recommended by the Student Promotion and Graduation Committee by repeating the failed course. When a course is repeated, the student may earn a maximum grade of "C". Following successful repetition of the course, the permanent record of the student will be updated to indicate that the failing grade has been successfully corrected.

The grade earned each time is recorded, but only the most recent grade is used in the computation of the student's cumulative grade point average.



### Grade and Quality Point Scale

Grade	Quality Points (per credit)	Comments
A	4.000	-
A-	3.670	-
B+	3.330	-
B	3.000	-
B-	2.670	-
C+	2.330	-
C	2.000	-
F	0.000	-
I	0.000	An Incomplete (I) grade may be assigned by an instructor when a student's work is of passing quality but incomplete, or if a student qualifies for re-examination. It is the responsibility of the student to request an extension from the course instructor. By assigning an "I" grade, it is implied that an instructor agrees that the student has a valid reason and should be given additional time to complete required coursework. All incomplete (I) grades will be resolved within 10 calendar days from the end of final exams for the quarter. In the case of courses ending prior to final exam week, it is the obligation of the course director to monitor the use and resolution of the incomplete grade with notice to the Registrar.
IP	0.000	An In-Progress (IP) grade may be assigned when extenuating circumstances make it necessary to extend the grade completion period past 10 calendar days (e.g. illness, family death). Authorization by the Dean is required, and the completion period should not typically exceed one quarter.
P	0.000	Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of "P" is counted toward credit hour accruals for graduation but does not affect GPA calculations.
F	0.000	Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of "F" is counted toward credit hour accruals as attempted but not completed. Grade of "F" is calculated into the GPA (quality points are lowered due to unsuccessful course completion).
W	0.000	Withdrawal is given if the work completed up to the time of withdrawal was satisfactory. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation.
W/F	0.000	Withdrawal/Failing is given if the work completed up to the time of withdrawal is below the passing grade level for the Program/School. This grade is not counted in any GPA calculation and is not counted in credit hour accruals for graduation. "W/F" may be considered as a failure by a Student Academic Review Committee. Multiple "F's" and "W/F's" can be grounds for dismissal.
AU	0.000	This designation indicates an audited course in which a student is registered with the understanding that neither academic credit nor a grade is earned. The status of the course cannot be changed from audit to full credit after the start of the quarter. The designation AU is not counted in the GPA calculation.
AP		This designation indicates the decision of a college to award academic credit that precludes a student from taking required course work. The designation of Advanced Placement (AP) is applied toward credit hour accruals, but is not counted in the GPA calculation.

### Graduation Honors

Graduation honors are awarded to graduating students who have distinguished themselves by virtue of high academic achievement while enrolled in the professional program at Midwestern University Chicago College of Optometry. Only grades from the academic courses taken at the University will be included in determining graduation honors. Grades in OPTOD 1770, 1771, 1772, 1773, 1800, 1810, 1820, and 1830 are not included in the calculation of the didactic course grade point average for graduation honors. Students who receive a failing grade in any course will not be eligible for graduation honors regardless of their GPA.

Grade Point Average for Didactic Courses	Graduation Honor
>3.90	Summa cum laude
3.75 - 3.89	Magna cum laude
3.50 – 3.74	Cum laude

### Grade Appeals

A student whose academic progress will be subject to review by the Student Promotion and Graduation Committee and who wishes to appeal a grade must do so in an expedited manner prior to the scheduled meeting of the committee. In this case, an appeal of a didactic course grade must be submitted within one business day following posting of the grade and must be based on one of the following premises:

1. Factual errors in course assessment tools
2. Mathematical error in calculating the final grade
3. Bias

The course director must act on this appeal within one business day. If the appeal is denied, the student has the right to appeal the decision to the Assistant/Associate Dean of Academic Affairs. The Assistant/Associate Dean of Academic Affairs should notify the student of his/her decision within one business day following receipt of the student's reappeal. The decision of the Assistant/Associate Dean of Academic Affairs is final.

An appeal of a failing clinical clerkship or rotation grade must be submitted within two business days after a grade for rotation is posted. The course director must act on this appeal within two business days. If the appeal is denied, the student has the right to appeal the decision to the Associate Dean of Clinical Affairs. The Associate Dean of Clinical Affairs should notify the student of his/her decision within one business day following receipt of the student's reappeal. The decision of the Associate Dean of Clinical Affairs is final.

Any extension of the time for student appeal or course director's decision must be approved by the College Dean.

All appeals and decisions must be communicated in written form.

### Technology

Students must have a laptop computer that has internet capability to use in various learning activities. It is required that students bring their laptops to orientation for verification, and to download software needed to complete certain in-class and laboratory assignments.

### Immunizations

Students enrolled in a program with a clinical component are required to follow the immunization policy as outlined in the immunization section of the University's Student Handbook. Immunization requirements for Chicago College of Optometry students are subject to applicable current state health department protocol and affiliated rotation requirements. Students who do not follow the immunization policy by the stated deadline may jeopardize continued enrollment in the college. If, at any time, immunizations expire or are not up to date, the student may be suspended until such time that they are in full compliance with this requirement.

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Assistant Professor

**Nalini Chandar, Ph.D.**

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