YOU ALWAYS WANTED [TO MAKE A DIFFERENCE]

WE’LL BUILD YOUR FUTURE.

Catalog 2014-2015
Downers Grove, Illinois Campus

Midwestern University
Educating Tomorrow's Healthcare Team
Midwestern University Course Catalog 2014-2015

This catalog is published for the convenience of students at Midwestern University (MWU). It is intended to be effective as of June 1, 2014. Midwestern University reserves the right to make changes in any or all specifications contained herein and to apply such revision to registered and accepted students as well as to new admissions. No contractual rights between Midwestern University and any student are intended and none may be deemed to be created by issuance of this catalog.

Midwestern University provides equality of opportunity in its educational programs for all persons, maintains nondiscriminatory admission policies, and considers for admission all qualified students regardless of race, color, sex, sexual orientation, religion, national or ethnic origin, disability, status as a veteran, age, or marital status.

Midwestern University is not responsible for loss of or damage to a student’s personal property on premises owned or operated by the University, regardless of cause.

© Copyright Midwestern University 2014.

OFFICE OF ADMISSIONS

www.midwestern.edu

Downers Grove Campus
555 31st Street
Downers Grove, Illinois 60515
(800) 458-6253
(630) 515-6171
E-mail: admissil@midwestern.edu

Glendale Campus
19555 North 59th Avenue
Glendale, Arizona 85308
(880) 247-9277
(623) 572-3215
E-mail: admissaz@midwestern.edu
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 your community as a healthcare professional who has 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, or the College of Dental Medicine-Illinois, 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. Goeppinger, Ph.D.
President and Chief Executive Officer

GOVERNANCE
Board of Trustees
William D. Andrews,
Chair
Sr. Anne C. Leonard, C.N.D.,
Vice Chair
Gerrit A. van Huisstede,
Secretary/Treasurer
Kathleen H. Goeppinger, Ph.D.,
President and Chief Executive Officer
The Honorable Jean L. Baxter, J.D.
Michael J. Blend, Ph.D., D.O.
Janet R. Bolton, CFP, CIMA
John H. Finley, Jr., D.O.
Warren B. Grayson, J.D.
Gretchen R. Hannan
Kenneth R. Herlin
John Ladowicz, M.B.A.
Kevin D. Leahy
Madeline R. Lewis, D.O.
Robert M. Lockhart, Ph.D.
W. Jay Lovelace
The Honorable Elaine M. Scruggs
Paul M. Steingard, D.O.
Gary L. Trujillo, M.B.A.

Officers and Administrators
Kathleen H. Goeppinger, Ph.D.
President and Chief Executive Officer
Arthur G. Dobbelkaere, Ph.D.
Executive Vice President and Chief Operating Officer
Gregory J. Gaus
Senior Vice President and Chief Financial Officer
Karen D. Johnson, Ph.D.
Vice President, University Relations
Dean P. Malone
Vice President, Finance
John R. Burdick, Ph.D.  
Dean, Basic Sciences, and Vice President, Clinic Operations
Theresa Welch Fossum, D.V.M., M.S., Ph.D., DACVS  
Vice President of Research and Strategic Initiatives
Mary W. L. Lee, Pharm.D., BCPS, FCCP  
Vice President and Chief Academic Officer, Pharmacy and Optometry Education
Angela L. Marty, PHR  
Vice President, Administration and Human Resources
Dennis J. Paulson, Ph.D.  
Vice President and Chief Academic Officer, Medical, Dental and Veterinary Education
Kathleen N. Player, Ed.D., MSN, M.B.A., MS-C  
Vice President and Chief Academic Officer, Colleges of Health Sciences
Thomas A. Boyle, D.O., FACOEP, FACEP  
Dean, Postdoctoral Education
Teresa A. Dombrowski, Ph.D.  
Dean of Students, Downers Grove Campus
Mitchell R. Emerson, Ph.D.  
Interim Dean, College of Pharmacy-Glendale
Nancy F. Fjortoft, Ph.D.  
Dean, Chicago College of Pharmacy
Russell O. Gilpatrick, D.D.S.  
Dean, College of Dental Medicine-Arizona
Donald Jarnagin, O.D.  
Dean, Arizona College of Optometry
Lori A. Kemper, D.O., M.S., FACOEP  
Dean, Arizona College of Osteopathic Medicine
Ross J. Kosinski, Ph.D.  
Dean of Students and Director of Community Outreach, Glendale Campus
M.A.J. Lex MacNeil, D.D.S.  
Dean, College of Dental Medicine-Illinois
Karen J. Nichols, D.O., M.A., MACOI, CS  
Dean, Chicago College of Osteopathic Medicine
Fred D. Romano, Ph.D., M.S.  
Dean, Downers Grove Campus, College of Health Sciences
Brian K. Sidaway, D.V.M., M.S., DACVS  
Dean, College of Veterinary Medicines
Jacquelyn M. Smith, Ph.D.  
Dean, Glendale Campus, College of Health Sciences

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 undergraduate, 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, and the College of Dental Medicine (CDMA) in 2006. 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 Medical Campus in Spring 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, and the College of Veterinary Medicine in 2012. The campus has seen rapid growth in the number of buildings, academic programs, faculty, staff, and students. Today the Glendale Campus, located on 145 acres, has 35 buildings that provide for academic classrooms, state-of-the-art laboratories, student commons, auditorium, recreation center, student housing, a Multispecialty Clinic, and the Dental and Eye Institutes.

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, A Commission of the North Central Association of Colleges and Schools (230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413; 800/621-7440; www.higherlearningcommission.org).

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

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 provides equality of opportunity in its educational programs for all persons, maintains nondiscriminatory admission policies, and considers for admission all qualified students regardless of race, color, sex, gender, sexual orientation, religion, national or ethnic origin, citizenship status, disability, status as a veteran, age, or marital status.

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.
- The Midwestern University Multispecialty Clinic provides a state-of-the-art educational experience for
Midwestern 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 Midwestern 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 background 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, Midwestern University requires students to submit to criminal background checks.

It is the policy of Midwestern 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. 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. Some 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 Midwestern 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 Midwestern University website (http://www.midwestern.edu) and selecting MWUNET, the student can find the Student Handbook and consent form.

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:
   a. Request for additional detailed information about the positive criminal background check report. This may entail one or more meetings with the student.
   b. 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 College Dean (or their designee), will determine whether or not the student should be disqualified from matriculation or continued enrollment. Criminal convictions 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 conviction, 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.

4. Failure to disclose a conviction or material misrepresentation of information by an incoming or enrolled 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. Students must disclose any misdemeanor or felony charge/conviction.

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 other than the home state of their college where the student is interested in participating in a preceptorship, internship, clinic or other rotation to determine whether or not their conviction may be a barrier to participation.

7. Students are required to disclose to the Dean of Students and appropriate College Dean any arrests, criminal charges, or convictions against them during their entire period of enrollment as a student at Midwestern University. Such arrests, criminal charges, or convictions may negatively impact a student’s ability to obtain and/or complete clinical rotations or preceptorships.

8. Midwestern University does not guarantee clinical rotations for students who have a history of felony or misdemeanor charges/convictions. In such cases, the University confidentially shares information about the student’s positive criminal background 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.
   a. If this information is known by the University prior to the student’s matriculation, the Dean of Students and/or College 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 so that appropriate action can be taken.
   b. If this information is known by the University after the student’s matriculation, the Dean of Students and/or College 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 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 Office of Student Services and Office of the College Dean.

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/HOSTILE WORKING ENVIRONMENT**

Midwestern University (“MWU”) believes in the dignity and worth of its students, faculty, staff, Interns, and Residents and prohibits conduct or behavior, which has the effect of substantially interfering with the individual’s performance or creates an intimidating, hostile, or offensive learning/working environment. Members of the MWU community have a right to be free from harassment based on a person’s legally protected status.

It is the policy of MWU to provide an environment that is free from harassment because such conduct seriously undermines the atmosphere of trust and respect that is essential to a healthy work and academic environment. The conduct prohibited by this policy includes all unwelcome conduct (whether verbal, physical or visual) based on an individual’s protected status, such as gender, color, race, ancestry, religion, national origin, age, physical or mental disability, marital status, veteran status, citizenship status, sexual orientation or other protected group status as defined by law.

**Harassment Defined:** Harassment is offensive and unwelcome behavior that interferes with the work performance and effectiveness of an employee. It includes inappropriate and disrespectful conduct and communication. Harassment can take the form of, but is not limited to, the following:

- **Verbal:** For example, epithets, derogatory jokes or comments, slurs or unwanted sexual advances, invitations or comments.
- **Visual:** For example, derogatory and/or sexually-oriented posters, photography, e-mails, cartoons, drawings or gestures.
- **Physical:** For example, assault, unwanted touching, blocking normal movement or interfering with work.
- **Quid Pro Quo:** Explicit or implicit demands to submit to sexual requests in order for an employee to keep his or her job, or to avoid some other loss, and offers of employment benefits in return for sexual favors.
- **Retaliation:** Actions of revenge, directed toward one who had reported or threatened to report harassment.
- **Teasing and/or negative stereotyping:** Derogatory actions or comments; based on another person’s protected status.

The policies and procedures relating to Harassment/Hostile Working Environment are available in the Student Handbook (http://mwunet.midwestern.edu/administrative/SS/ssStuHANDBOOK.htm).

**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 faculty, department/division and/or College. Students should refer to their course syllabus or to the college-specific section of the University Catalog 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 College or department/division has the prerogative to establish its 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/exam environment that is most conducive to teaching, learning, and performing one’s best on exams, students are expected to behave in a manner that is not disruptive or disrespectful to any person and that does not adversely affect teaching, learning, or examination performance of any person. If cell phones and pagers 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 or examination room, forfeiting their right to take the exam. 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.

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 Credit Policy
Didactic course credits are generally determined according to the following formula. One credit is assigned to a course for the following course-related contact time activity per week:

- 1 formal lecture hour
- 2–4 laboratory hours
- 2 case discussion, interactive group problem-solving, recitation, or workshop hours
- 3 contact hours of other activities. 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.

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

- For AZCOM, CCOM, CCP, CPG, CDMA, CDMI, CVM, AZCOPT: Each week of full time experiential education is equivalent to 1.5 credits
- For CHS: Each week of full time experiential education is equivalent to 1 credit

The Curriculum Committee of the College approves the number of credit 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 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 50% of the tuition costs to audit a course.

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 receipt 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 24 hours following receipt of the grade and must be based on one of the premises stated above. The course director must act on this appeal within 24 hours. Any appeal of this decision will be addressed by the course director’s supervisor. An appeal of a failing clinical clerkship or rotation grade must be submitted within one week after a grade for rotation is posted. The course director must act on this appeal within one week of receipt of the grade appeal. Any appeal of this decision will be addressed by the course director’s supervisor. 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.

1. College faculty approve the lists by delegating this function to the college/program’s Academic Review or Promotions Committee.
2. The Academic Committee of the Midwestern University Board of Trustees is responsible for reviewing and approving the list before the list is presented to the 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 incomplete (I) 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 starting from the last day of final examinations for the quarter. If an incomplete grade remains beyond the 10 calendar days, it is automatically converted to a grade of F 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 Classes**
The last day that a student may add a class is the first Friday of the quarter. The last day that a student may drop a course without impact to the transcript is the first Friday of the quarter. For all courses to be added/dropped a student must complete a course add/drop form. A course add/drop form can be obtained from the Office of the Dean or on-line at http://online.midwestern.edu. To add/drop a course a student must have the following approvals.

**CDMI/CDMA/C.COM/AZCOM:** Dean for all core course drops; course director for all elective add/drops

**AZCOPT/CCP/CPG:** Dean and course director for all core and elective course add/drops

**CHS:** Program Director for all core and elective course add/drops

Courses dropped after the first Friday of the quarter may be recorded as “W” (Withdrawal) or “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 College Dean to discuss the leave of absence;
2. A student must provide written notification and documentation, if applicable, to the 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 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. In this case, 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. 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 thirty 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 application 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, husband/wife, child (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 granted 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 630/515-6074 (Downers Grove Campus) and 623/572-3325 (Glendale Campus). Registrar services can be accessed at http://online.midwestern.edu.

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 as well as students enrolled in the Biomedical Science Program. Students registering for special schedules should contact the Office of the Dean or CHS 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 some programs when a "D" 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, following department approval, 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 any format, not limited to, a directed readings remedial course with examination, to repeating the course in its entirety the next academic year. In either case, the student must be registered for the course and will be charged the appropriate tuition. 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 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 discarded.
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 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 $5.00 per official transcript release.
4. Individuals who are no longer students at MWU are charged $5.00.
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 diploma by writing to the Registrar. The charge for a duplicate diploma is $50.00 paid in advance.

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 receive approval from their respective course directors. Following approval by the course directors, the withdrawal must be approved by the Program Director, if applicable, and by the College Dean. The student must complete a course add/drop form, which can be obtained from the Office of the Dean or the Registrar’s website. If approval is granted, the student receives one of the following grades: "W" (Withdrawal), "WF" (Withdrawal/Failing), or "F" (Failing). A course dropped by the first Friday of the course will not appear on the student’s transcript. A course dropped after week one through completion of 50% of the course will receive a "W". A course dropped after 50% and up to 80% of the course is completed will receive a "W" if the student has a passing average in the course at the time of withdrawal or a "WF" if the student has a failing average in the course at the time of withdrawal. A "WF" may be considered as a failure by an Academic Review/Promotion Committee. An "F" grade can also be given if a student withdraws after 80% of a course is completed and the student has a failing average in the course at the time of withdrawal. No course may be dropped after the last day of classes. No withdrawals are allowed during the final examination period. The course director is responsible for submitting the correct grade or grade notation. 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. In the case of CCOM 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.

<table>
<thead>
<tr>
<th>Time at Which Course Withdrawal is Requested</th>
<th>Course Grade at the Time of Withdrawal</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to first Friday of the course</td>
<td>N/A</td>
<td>No grade - course does not appear on the transcript</td>
</tr>
<tr>
<td>Up to 50% of the course is completed</td>
<td>N/A</td>
<td>W</td>
</tr>
<tr>
<td>Greater than 50% and up to 80% of the course is completed</td>
<td>Passing Failing</td>
<td>W</td>
</tr>
<tr>
<td>Greater than 80% of the course is completed</td>
<td>Passing Failing</td>
<td>W</td>
</tr>
</tbody>
</table>

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 Midwestern 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
Midwestern University
555 31st Street
Downers Grove, IL 60515
630/515-6171
AdmissIL@midwestern.edu

Office of Admissions
Midwestern University
19555 North 59th Avenue
Glendale, AZ 85308
623/572-3215
888/247-9277
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. 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. 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. 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 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 Midwestern University Programs
At the time of application, students enrolled in a Midwestern University program are guaranteed an admission interview with another Midwestern 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 Midwestern University grade point average, derived from all courses completed at Midwestern, 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.
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, 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 and CDMI. 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
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.

MWU 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.

Recreational Activities
Committed to the concept of wellness, Midwestern University encourages students to utilize the facilities available in Recreation and Wellness 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.

Wellness Center
The Wellness Center offers health care service to all students, faculty and staff members on the Downers Grove Campus. The Wellness Center provides a number of basic health care services including immunizations, acute care, health screening, lab work, wellness programming and a variety of other educational services.

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 Offices 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 to registered and accepted students.

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 or accounts receivable at ilbursar@midwestern.edu.

Office of Student Financial Services
Midwestern University
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 financial aid.

A student who is convicted of a state or federal offense involving the possession or sale of an illegal drug that occurred while the student was enrolled in school and receiving Title IV aid, is not eligible for Title IV funds. [An illegal drug is a controlled substance as defined by the Controlled Substance Act and does not include alcohol and tobacco.]

A borrower’s eligibility is based on the student’s 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 who is convicted of a drug-related offense that occurred while the student was enrolled in school and receiving Title IV aid loses Title IV eligibility as follows:

- 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: indefinitely from the date of the third conviction

- For the sale of illegal drugs:
  - First offense: two years from the date of conviction
  - Second offense: indefinitely from the date of the second conviction

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 may regain eligibility at any time by completing an approved drug rehabilitation program and by informing the school that he or she has done so. A student regains Title IV eligibility on the date he or she successfully completes 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 criteria:

- 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.

For a student whose Title IV eligibility is reinstated after a drug conviction, the maximum loan period that a school may certify is the academic year during which the student regains eligibility. However, the school may not certify eligibility prior to the date on which eligibility is regained. A student who loses eligibility during a loan period is immediately ineligible to receive subsequent disbursements of Federal Direct Loan Program funds and is required to repay any Title IV funds received after the date he or she loses eligibility. Schools are not required to recalculate a student’s loan amount.

Financing an Education
The Office of Student Financial Services helps coordinate four types of financial aid: scholarships, Federal Work-Study, Veterans’ Educational Benefits, and loans.

Scholarships

All Programs
MWU Need-Based Scholarship: Awarded to students who demonstrate the most significant financial need as determined by their Free Application for Federal Student Aid (FAFSA). Students must meet MWU’s priority financial aid deadline date in order to be considered for eligibility. MWU’s goal is to award between $150,000 and $300,000 each year in non-renewable institutional scholarships to students from each of the University’s colleges. The availability of these funds is determined annually and may be increased or decreased.

MWU Financial Literacy Scholarship: Through our "Sensible Strategies” Program, MWU is committed to providing information about financial literacy and planning for the future through a variety of University-sponsored events, programs and planning tools. It is our objective to encourage students to borrow less, live frugally and graduate with the least possible debt. We demonstrate our commitment to this effort through these scholarships. It is anticipated that these awards will be made annually in support of our efforts to encourage excellent financial practices. Funding is provided by the University’s former School-As-Lender program. Future amounts and availability of funding will depend upon market conditions.

MWU Spirit of Service Scholarship: These scholarships are funded through proceeds from the Chippin’ in for Students Golf Classic. They were established for the benefit of MWU students who have actively participated in community service activities and demonstrate leadership. Students from all of MWU colleges are eligible for these 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 grant varies per year. Students are notified by the Office of Development and Alumni Relations or the CCOM Scholarship Committee when applications become available.

Federal Work-Study
Student employment is open to all students who apply for work-study and demonstrate financial need. Students who qualify for this program may work on campus or off campus if performing community service activities or research. The Office of Student Financial Services determines the total amount students may earn. This is NOT a loan program. Students who obtain Federal Work-Study employment will be paid bi-weekly at the rate of $11.00 per hour for regular work-study and $13.00 per hour for community service or research work-study. Awards are based on the availability of federal funding.

Federal Student Loans

All Programs

1. Federal Perkins Loan: Qualified graduate students with exceptional financial need may borrow from this campus-based loan program. The interest rate is 5%. Loan amounts and availability of funding are dependent on annual Federal allocations. Awards typically range from $3,000 to $4,000 per academic year. A student may borrow an aggregate maximum of $60,000 for undergraduate and graduate study. The student borrower will also receive a nine-month grace period and may defer or have the loan forgiven in certain circumstances.

2. Direct Unsubsidized Stafford 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 for undergraduate and graduate study (includes amounts borrowed under the Subsidized Stafford program). Students enrolled in the osteopathic medicine, dental medicine, optometry, podiatry, clinical psychology and pharmacy programs are eligible to apply for higher annual loan limits based on their program of study and year in school and may borrow up to an increased aggregate loan maximum of $224,000 (includes loans from prior schools). Stafford loans with disbursements prior to July 1, 2013, must be repaid at a fixed interest rate of 6.8%. Future loan rates will be based on the Department of Education’s determination and will be changed annually. The student is responsible for payment of the interest but may elect to have the interest accrue and capitalize while enrolled.

3. Direct Graduate PLUS Loan: Graduate students enrolled at least half-time in a degree seeking program may borrow up to the budgeted cost of attendance less other aid. Direct Graduate PLUS loans with disbursements prior to July 1, 2013, must be repaid at a fixed rate of 7.9%; FFEL PLUS loans are at 8.5%. Future Direct PLUS loan rates will be based on the Department of Education’s determination and will be changed annually. Repayment of the loan begins 6 months after graduation, withdrawal, or upon enrolling on a less than half-time basis. Students should check with the lender for deferment eligibility.

Dentistry 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 a HPSL. 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 begins to accrue. Students who are enrolled less than full-time in a given quarter will not be eligible to receive HPSL funds for a subsequent quarter.

Medical Programs

1. CCOM Student Loan Fund: This institutional loan program is offered to second, 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 you enter into an approved internship.

2. Primary Care Loan: Priority consideration is given to certain third- or fourth-year students with exceptional financial need who are committed to practicing primary care medicine. Such students may borrow this campus-based loan that offers a one-year grace period and a residency deferment of up to four years. The interest rate is 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 who are enrolled less than full-time in a given quarter will not be eligible to receive PCL funds for a subsequent quarter.

Financial Aid for Repeat Courses

Students repeating a previously passed course (grade of “C” or better) are ineligible for Federal financial aid for the repeated course. Students who are repeating a failed course(s) may be eligible for federal aid to repeat the failures(s) as long as Satisfactory Academic Progress standards (SAP) are met. Those ineligible for Federal aid may be eligible for private loans. Students should contact the Student Financial Services Office to determine specific eligibility.

Private Student Loans

Private Educational Loans: Graduate students enrolled at least half-time in a degree-seeking program may be eligible to borrow up to the total cost of attendance less other aid. The loan is not based on financial need. Rather, eligibility is based on subtracting other financial aid assistance from a student’s total cost of attendance. Loan eligibility is also based on the student borrower’s and/or co-borrower’s credit history and ability to repay the loan. The in-school or grace period interest rate is variable and usually based on the Prime, LIBOR or T-Bill rate plus an additional interest charge (which is determined by the borrower and/or co-borrower’s credit history). The student is responsible for payment of interest but may elect to have the interest accumulate and capitalize while enrolled at MWU. Repayment may begin immediately upon enrolling on a less than half-time basis or upon graduation. Students will need to check with their lender for further details on postponement or deferment of loan payments.

Veterans’ Educational Benefits

Midwestern University is approved to offer Veterans’ Educational Benefits by the Illinois Department of Veteran Affairs for most Downers Grove programs. For additional information, contact the Registrar’s Office. Because Midwestern University is a private, not-for-profit institution, students who are Illinois veterans are not eligible for Illinois Veteran Grant (IVG) funding. The address is:
Applying for Financial Aid

Budget and Cost of Attendance
Each program at Midwestern University has an established budget or Cost of Attendance (COA as it is commonly referred to). Budgets are designed to primarily cover a student’s educational and living expenses while enrolled; if enrolled for nine months, for example, the budget covers the expenses for that period only. The standard budget for each program is developed using federal guidelines that allow for a reasonable standard of living for students within the community. Each year the major components of the budget are reviewed and modified based on changes in costs. To further augment and validate the expenses included in the budget, Midwestern University periodically surveys students in the fall to gather actual expenses being incurred.

Representative major categories included in every budget include:

- Tuition and Fees
- Books and Supplies
- Health and Disability Insurance
- Food
- Transportation Expenses
- Housing
- Utilities
- Personal Expenses

Some programs may include technology and equipment fees as well. In all instances, federal regulations govern what is or is not allowed in budgets.

While most students find it necessary to borrow to pay for their education, we highly encourage students to live as modestly as possible in an effort to minimize debt following graduation by utilizing our “Thrifty Budget”. Good choices now can lead to financial freedom down the road. The staff in the Office of Student Financial Services is available to discuss any questions surrounding budgets.

Online Application Process
Online application instructions for the upcoming financial aid award year are made available on an annual basis to each continuing class of students. All accepted students who have paid their matriculation deposit will receive on-line application instructions for the upcoming academic year. Accepted applicants will also have electronic access to other relevant financial aid resources provided on the University website and on Blackboard.

Downers Grove Tuition and Fees (for academic year 2014-2015)
Please Note: Tuition rates will be subject to change each academic year for all enrolled students. Historically, tuition has increased between 4% and 7% annually.

<table>
<thead>
<tr>
<th>Program</th>
<th>Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago College of Osteopathic Medicine</td>
<td>$59,826</td>
</tr>
<tr>
<td>Chicago College of Pharmacy*</td>
<td>$38,223</td>
</tr>
<tr>
<td>College of Dental Medicine-Illinois**</td>
<td>$67,004</td>
</tr>
<tr>
<td>Physician Assistant Studies</td>
<td>$42,119</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>$35,780</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>$37,318</td>
</tr>
<tr>
<td>Clinical Psychology Matriculated in Fall 2008 or prior</td>
<td>$29,882</td>
</tr>
<tr>
<td>Clinical Psychology Matriculated in Fall 2009 or after</td>
<td>$563/credit hr.</td>
</tr>
<tr>
<td>Biomedical Sciences, Master of Arts</td>
<td>$36,560</td>
</tr>
<tr>
<td>Biomedical Sciences, Master of Biomedical Science</td>
<td>$32,675</td>
</tr>
<tr>
<td>Doctor of Health Science</td>
<td>$611/credit hr.</td>
</tr>
<tr>
<td>Speech Language Pathology***</td>
<td>$35,936</td>
</tr>
</tbody>
</table>

For the 2014-2015 academic year, all programs (both full and part-time) have an annual student services fee of $620. Additional fees may be assessed including disability insurance or other charges as determined by each individual college. Students enrolled on a less than full-time basis will be charged tuition based on a per-credit-hour fee as determined by
the University. If a student is given "advanced standing" and registered less than full-time in a given quarter, they will be charged on a per-credit-hour basis. All rates and fees are subject to correction if they are stated in error.

*The Chicago College of Pharmacy Program has the following additional fees:
- Technology fee - First Year Students Only - $1,640

**The College of Dental Medicine-Illinois Program has the following additional fees:
- Technology Fee - First Year Students Only - $1,500
- Surgical Atlas and Telescope Fee - First Year Students Only - $1,802
- Supply Fee - All Years - $4,314
- Instrument Rental Fee - All Years - $1,990
- Simulation Laboratory and Clinic Fee - All Years - $5,178

***The Speech Language Pathology Program has the following additional fees:
- Technology fee - First Year Students Only - $174

**Tuition Payment**

Tuition for full-time students is an annual tuition and may be payable over 2, 3 or 4 quarters per year depending on the academic schedule of the student, except for DHS (Doctor of Health Sciences) and students who matriculated into the Doctor of Clinical Psychology Program in Fall 2009 or thereafter. Any student enrolled where the course load meets the full-time definition will pay full-time tuition. Students exceeding the maximum prescribed course load will pay overload charges. Students enrolled in an extended studies program will be charged the annual tuition rate for their extra year of enrollment. Students extending their program for one quarter or less will be charged the quarterly tuition rate or on a per credit hourly rate depending on the program and their enrollment status.

We encourage all students to pay their bills via our 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 tuition payments. 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. If tuition payments are made through the mail, please address the envelope as follows:

Midwestern University
Attn: Student Financial Services
555 31st Street
Downers Grove, IL 60515

Students who fail to pay tuition at the designated times will have their account processed according to Midwestern University's Overdue Accounts Policy.

**Payment Plans**

The Office of Student Financial Services offers a payment plan that allows students to divide an unpaid balance into equal monthly payments over the course of a quarter. The following are policies regarding the payment plan:

1. All financial aid must be applied toward the unpaid balance due first before accepting student payments.
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.
3. Payment plans will be effective for the entire quarter.
4. The plan is interest free.
5. A fee of $25 will be charged per quarter. This fee is to cover costs associated with payment plan enrollment, maintenance, billing, collections, and monthly follow-up on the plans. The balance will be divided into three payments with the $25 fee being added to the initial payment.
6. A 1.5% late fee will be applied to accounts at 10 days late, and the balance will be accelerated to fully due.
7. The unpaid balance must be paid by the end of each quarter.
8. To maintain eligibility, students must adhere to the monthly due dates and not 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 that is effective for the first year of study. Prepayment of the entire program’s tuition must be paid in full by the first day of matriculation.

Any student may prepay tuition a year at a time at the current rate. This tuition must be prepaid one full academic year in advance. For example, a student matriculating in the 2014-2015 academic year in September 2014 who wishes to prepay 2015-2016 tuition must make this prepayment by the first day of matriculation in September 2014. 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.
Credit Cards

The Student Financial Services Office does accept credit cards as payment of tuition, student services fees, disability/health insurance fees, and institutional housing; however, the following requirements do apply:

1. MasterCard, Visa, Discover and American Express are accepted.
2. All financial aid funds must be applied to the balance first before using a credit card for payment.
3. When using a parent’s credit card, the Student Financial Services Office must receive a memo authorizing the charges or have phone authorization from the parent.
4. 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 in which the student owes an outstanding balance after applying financial aid funds.

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 fee. Students who are enrolled 3 or 4 quarters per year will be charged the full annual student services fee. 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% and 50% of the annual student services fee, respectively. The student services fee funds such areas as the recreation center, sports intra-murals, counseling services, operation of the student lounge, student council, student representation in government, graduation fees and student events on and off-campus.

Add/Drop Charges
The last day to add or drop a course is the first Friday of each quarter. Charges for courses added/dropped by this date will be adjusted according to the student’s new in-school status (i.e. full-time, part-time, 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 12 credit hours. The per-credit hourly rate is multiplied by the enrolled credit hours to equal the tuition charge for the quarter.

Course Overload
Students desiring to register for more than the prescribed course load in a given quarter are considered to have registered for a course overload. These students must receive prior approval from the College Dean before starting the quarter. In addition to full tuition, tuition will be charged for each additional credit hour above the prescribed course load on the following basis:

- The credit hour rate for courses that cause a course overload will be calculated based on the current quarterly full-time tuition rate divided by the current quarter’s prescribed course load.
- The per credit hour rate is multiplied by the enrolled credit hours that cause a course overload to equal the tuition charge for the quarter.
- Overloads are defined as follows: CCOM > 31 credit hours; CDMI > 30 credit hours; CCP > 21 credit hours; CHS Graduate > 23 credit hours.

Overdue Accounts
The Office of Student Financial Services will follow up with students to collect past due accounts. This will enable the Office of Student Financial Services to encourage all students to pay their balance owed on time so that they are not dropped from the enrollment of their College.

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

1. 1.5% late fee on unpaid balance is assessed at 10 days past due for all balances of $500 or more. Balances of $499 or less are assessed a flat $7.50 late fee. These fees are assessed on a monthly basis throughout the quarter until the account becomes current.
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, College Dean will be notified of delinquency.
5. Dropped from enrollment of the College.
6. Will not be permitted to attend or participate in class, participate in clinical rotations, take examinations, or receive any academic credit. Will lose student status.
7. Suspension and/or termination from MWU. Student must reapply for admission to MWU.
8. Withholding of academic transcripts.
9. Account referred to collection agency for further action.

All students with accounts 30 days delinquent may be terminated from MWU.

Note: A student may be exempt from payment deadlines and permitted to continue in school without risk of suspension. However, students must notify the Office of Student
Financial Services 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, scholarship, or grant funds by the due date);
2. A payment plan has been approved by the Office of Student Financial Services.

Returned Checks
A $35.00 fee will 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 exception will be made.

Receiving Funds
Students who borrow funds for their living expenses will receive periodic refunds by direct deposits to cover these expenses. Representative living expenses include food, housing, utilities, transportation, books and personal expenses. Students have the obligation to budget funds appropriately so they are able to cover their expenses month to month. Some one-time expenses such as a laptop or medical equipment required at the beginning of a course of study are included in the first disbursement of the year. The objective is to ensure that students have the funding for these major outlays as they occur and are not forced to use credit cards.

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 loan tracking/repayment tool, Loanlook. We are committed to assisting students as they develop strong money management skills. Go to the 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 mandatory requirement must submit a letter to the Director of Student Financial Services 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 fees or charges that result due to checks written when a student had insufficient funds in an 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 that the deposit has cleared prior to writing checks.

A direct deposit made in error must immediately be returned 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 students including those applying for or currently receiving 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) according to qualitative (GPA) and quantitative (pace/maximum timeframe) measures. Both qualitative and quantitative 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.

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 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.

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 over a year or longer 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.

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 "probation" status is issued for the following quarter. Students may be eligible for Title IV or Title VII funding during a probationary period as long as an appeal is approved by the Financial Aid Committee. Appeals must include an Academic Plan that ensures the student is able to meet SAP standards by the end of the subsequent quarter. A student may be removed from probation if SAP is achieved at the end of the quarter; otherwise, the student will not be eligible to receive Title IV financial aid and must continue at their own expense each quarter until SAP is achieved.

ANNUAL SAP REVIEWS: A financial aid "suspension" is issued at the end of the Spring quarter for students not meeting satisfactory academic progress. 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 as long as the requirements as specified in the Academic Plan are followed. An Academic Plan must ensure that the student is able to 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 on a quarterly basis 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 during the year if the 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.

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 and forwarded 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. 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. Permanent suspension can be waived at the discretion of the dean of the respective college.
### MWU Standards of Satisfactory Academic Progress for Financial Aid Eligibility

<table>
<thead>
<tr>
<th>Academic Program</th>
<th>Standard &amp; Maximum Time Frames for Program Completion (in years)</th>
<th>Expected Program Completion Per Academic Year (% of coursework completed)</th>
<th>Minimum Cumulative GPA Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard</td>
<td>Maximum</td>
<td></td>
</tr>
<tr>
<td>CCOM</td>
<td>4</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>CCOM (Extended studies)</td>
<td>5</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>CCP (Pharm.D.)</td>
<td>4</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>CDMI (D.M.D.)</td>
<td>4</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>CHS–Biomedical Sciences (M.B.S.)</td>
<td>2</td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>CHS-Biomedical Sciences (M.A.)</td>
<td>1</td>
<td>1.5</td>
<td>66%</td>
</tr>
<tr>
<td>CHS-PA (M.M.S.)</td>
<td>2.25 (27 mos.)</td>
<td>3.33 (40.5 mos.)</td>
<td>30%</td>
</tr>
<tr>
<td>CHS (D.P.T.)</td>
<td>2.90 (35 mos.)</td>
<td>4.33 (52 mos.)</td>
<td>23%</td>
</tr>
<tr>
<td>CHS (M.O.T.)</td>
<td>2.25 (27 mos.)</td>
<td>3.33 (40.5 mos.)</td>
<td>30%</td>
</tr>
<tr>
<td>CHS (D.H.S.)</td>
<td>4.5</td>
<td>6.75</td>
<td>17%</td>
</tr>
<tr>
<td>CHS (Psy.D.) Matriculated prior to Fall 2009</td>
<td>4</td>
<td>6</td>
<td>17%</td>
</tr>
<tr>
<td>CHS (Psy.D.) Matriculated in Fall 2009 or after</td>
<td>5</td>
<td>7</td>
<td>14%</td>
</tr>
<tr>
<td>CHS - Speech Pathology (M.S.)</td>
<td>2</td>
<td>3</td>
<td>33%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Academic Status</th>
<th>Credit hours per quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>12, minimum</td>
</tr>
<tr>
<td>Three-Quarter Time</td>
<td>9-11 credit hrs</td>
</tr>
<tr>
<td>Half-Time</td>
<td>6-8 credit hrs</td>
</tr>
<tr>
<td>Less than Half-Time</td>
<td>1-5 credit hrs</td>
</tr>
</tbody>
</table>

**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.
Leave of Absence for Financial Aid Eligibility Policy and Procedure

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 an approved 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 an approved leave of absence are entitled to all the programs and benefits afforded by the student services fee; accordingly, the student will be charged quarterly.
   - A subsequent leave of absence 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.

2. For purposes of administering federal financial aid, a student who is receiving Title IV or Title VII financial aid funds and is granted an approved 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 an approved leave of absence that exceeds 90 days 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.

3. If the student who is receiving financial aid fails to return from the leave of absence at the end of the approved period, 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 last day of an approved leave of absence 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.

4. Before final consideration is given to granting the requested leave of absence, a financial aid administrator will meet with the student and provide information regarding loan obligations, possible revisions in aid deferment options and consequences of not returning to MWU at the expiration of the leave of absence.

5. A student on an approved 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. All outstanding balances must be paid in full prior to a student’s return from a leave of absence.
Procedure

1. Upon receiving written notification from the College Dean that a student has been granted an official leave of absence, the Office of Student Financial Services will take the following steps:
   - Recalculate the loan period and cost of attendance based on months of actual enrollment to determine the total amount of financial aid eligibility for the academic year and, if necessary, correct resulting over-awards.
   - Notify the student and lender(s) of the following:
     - Student’s last date of attendance;
     - Beginning and ending dates of the approved leave of absence;
     - Revised cost of attendance and financial aid eligibility;
     - Revised loan period, if applicable;
     - Revised graduation date, if applicable;
     - Revised student loan disbursement dates, if applicable.

2. The Office of Student Financial Services will promptly return to the lender any loan disbursements received during the approved leave of absence and, if applicable, request that the disbursement be reissued upon the student’s scheduled return to MWU.

3. If the student fails to return at the end of the federally approved 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 perform the following functions:
   - loan return calculations;
   - prompt return of federal funds or student loan funds to lender(s) within 45 days of receipt of notification of the student’s failure to return from the approved leave of absence;
   - attempt to contact the student by telephone for a personal exit interview consultation.
   - If the student cannot be contacted by telephone, the financial aid administrator will mail exit interview materials containing information on borrower rights/responsibilities, loan repayment options, loan deferment options, consolidation, total loan indebtedness and consequences of default directly to the student.
   - The Director of Student Financial Services will notify the College Dean and the Program Director, if applicable, of the student’s withdrawal status and the impact the withdrawal has on the student’s financial aid award package.

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, academic counseling, advisement, 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.

MWU Refund Policy: Return of Title IV and VII Funds

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. MWU’s refund policy includes the following guidelines:

1. Title IV funds include the following programs available at MWU, Direct Unsubsidized Stafford loans, Federal Perkins 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 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.
   - For students on a leave of absence, disability and health insurance fees paid to the University for the quarter will not be refunded. A student will be obligated to pay premiums through the end of the quarter.
   - For students on a leave of absence, no refund of student services fee will be made, as all campus services are still accessible by a student while on an approved leave of absence.
   - Title VII recipients will have future disbursements cancelled if the students is not enrolled full-time in subsequent quarters.

5. Withdrawal After 60% of the Quarter for Which the Student is Charged
   - No refund of tuition or student services fee 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.
   - For students on a leave of absence, disability and health insurance fees paid to the University for the quarter will not be refunded. A student will be obligated to pay premiums through the end of the quarter.

6. If a Subsequent Quarter(s) Has Been Prepaid
   - Tuition, student services fee, University housing, and health insurance fee, will be adjusted accordingly.

7. 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.

8. All refunds will be distributed in the following order as prescribed by federal law:
   - Direct Unsubsidized Stafford Loan
   - Federal Perkins 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 (MWU Need-Based Scholarship, 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 agency’s policy. 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 charges owed to the institution.

9. Students who borrowed and received monies from the Federal Direct Loan Program (Stafford loans, Graduate PLUS loans); Perkins 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 Office of Student Financial Services.

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.
ACADEMIC CALENDAR

SUMMER QUARTER 2014

Mandatory Rotation Orientation (PS-IV)  May 27 - 29, 2014
Classes Begin (DMD-III/DMD-IV)  June 2, 2014
Rotation Begins - Block 1 (PS-IV)  June 2 - July 11, 2014
Fieldwork Level II A (OT-III)  June 2 - August 22, 2014
Orientation (PA-I/PT-I)  June 4 - 5, 2014
Didactic Course (PA-II)  June 9 - 20 2014
Clinical Rotation Begins - Block 1 (MS-III/MS-IV)  June 9 - July 6, 2014
Classes Begin (PT-II/PT-III)  June 16, 2014
Didactic Course (PA-III)  June 16 - 20, 2014
Last Day to Add/Drop Classes (PT-II/PT-III)  June 20, 2014
Rotations (PA-II)  June 23 - December 7, 2014
Elective Rotations (PA-III)  June 23 - August 17, 2014

Independence Day Observed (No Classes) Library Closed  July 4, 2014
Rotation - Block 2 (PS-IV)  July 7 - August 3, 2014
Clinical Rotation - Block 3 (MS-III/MS-IV)  August 4 - 31, 2014
Didactic Course (PA-III)  August 18 - 22, 2014
Last Day of Classes (PT-II/PT-III/DMD-III/DMD-IV)  August 22, 2014
Degree Completion Date - PsyD (PSY-IV/PSY-V), MMS (PA-III)  August 22, 2014
Quarterly Exams (PT-II/PT-III)  August 25 - 29, 2014

Grades Due  August 26, 2014

Commencement - CHS (PSY-MA/PSYD/OT/PA)  August 28, 2014
Quarter Break (PT-II/PT-III)  September 1 - 5, 2014

FALL QUARTER 2014

Orientation (MS-I)  July 28 - July 31, 2014
Classes Begin (MS-I/MS-II) August 4, 2014
Last Day to Add/Drop Classes (MS-I/MS-II) August 8, 2014
Orientation (PS-I) August 15, 2014
Classes Begin (PS-I) August 18, 2014
Last Day to Add/Drop Classes (PS-I) August 22, 2014
Rotation - Block 3 (PS-IV) August 25 - October 3, 2014
Fall Quarter Orientation (DMD-I) August 26 - 27, 2014
Orientation (OT-I/MBS-I/MABS/PSY-I/SLP-I) August 26 - 27, 2014

**Labor Day Observed (No Classes) Library Closed** September 1, 2014
Clinical Rotation Begins - Block 4 (MS-III/MS-IV) September 1 - 28, 2014
Fieldwork Level II B (OT-III) September 2, 2014

**White Coat Ceremony** September 12, 2014
Clinical Rotation - Block 5 (MS-III/MS-IV) September 29 - October 26, 2014
Rotation - Block 4 (PS-IV) October 6 - November 14, 2014
Clinical Rotation - Block 6 (MS-III/MS-IV) October 27 - November 23, 2014
Last Day of Classes (PT-II/PT-III) November 14, 2014
Quarterly Exams (PT-II/PT-III) November 17 - 21, 2014

**Grades Due** November 18, 2014
Last Day of Classes (DMD-III/DMD-IV) November 21, 2014
Quarter Break (PT-II/PT-III/DMD-III/DMD-IV) November 24 - 28, 2014
Degree Completion Date - MOT (OT-III) December 4, 2014

**WINTER QUARTER 2014**

Rotation - Block 5 (PS-IV) November 17, 2014 - January 9, 2015

Clinical Rotation - Block 7 (MS-III/MS-IV) November 24, 2014 - January 4, 2015


**Practicum III (PT-III)** December 1, 2014 - February 6, 2015


Didactic Course (PA II) December 8 - 19, 2014


Rotations (PA-II) January 5 - June 21, 2015

Clinical Rotation - Block 8 (MS-III/IV) January 5 - February 1, 2015


**Rotation - Block 6 (PS-IV)** January 12 - February 20, 2015

**Martin Luther King, Jr. Day (No Classes) Library Closed** January 19, 2015

Clinical Rotation - Block 9 (MS-III/MS-IV) February 2 - March 1, 2015

Quarter Break (PT-III) February 9 - 13, 2015

**Practicum IV (PT-III)** February 16 - April 24, 2015


**Last Day of Classes (DMD-III/DMD-IV)** February 27, 2015


**Grades Due** March 3, 2015
SPRING QUARTER 2015

Rotation - Block 7 (PS-IV)  
February 23 - April 3, 2015

Clinical Rotation - Block 10 (MS-III/MS-IV)  
March 2 - 29, 2015

March 9, 2015

Practicum II (PT-II)  
March 9 - May 15, 2015

March 13, 2015

Clinical Rotation - Block 11 (MS-III/MS-IV)  
March 30 - April 26, 2015

Rotation - Block 8 (PS-IV)  
April 6 - May 15, 2015

Clinical Rotation - Block 12 (MS-III)  
April 27 - May 24, 2015

Clinical Rotation - Block 12 (MS-IV)  
April 27 - May 14, 2015

Degree Completion Date - DPT (PT-III)  
May 1, 2015

Fieldwork I - off-campus (OT-I)  
May 10 - 22, 2015

May 15, 2015

Quarter Break (PT-II)  
May 18 - June 7, 2015

May 18 - 22, 2015

Last Day of Classes (DMD-III)  
May 22, 2015

Degree Completion Date MA (PSY-II), MBS (MBS-II), MA (MABS), MS (SLP-II), DHS  
May 22, 2015

Memorial Day Observed (No Classes) Library Closed  
May 25, 2015

Quarter Break (DMD-III)  
May 25 - 29, 2015

Quarter Break (MS-III/PA-I/OT-I/OT-II/DHS/MBS-I/PSY-I/PSY-II/PSY-III/PSY-IV/PSY-V/SLP-I/DMD-I/DMD-II)  
May 25 - June 5, 2015

Practicum I (PT-I)  
May 26 - June 12, 2015

Graduation Ceremonies CCOM/CHS (PT/MBS/MABS/SLP/DHS)  
May 21, 2015

Graduation Ceremonies CCP/CDMI  
May 22, 2015

Grades Due  
May 26, 2015
MISSION
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 Multi-specialty 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
6. Provide elective opportunities for students to participate in research and scholarly activities
   • Providing service learning experiences
7. Sponsor service-learning experiences through required CCOM class and club service activities
   • Integrating MWU/OPTI exposure into the osteopathic student experience
8. Provide introduction to the MWU/OPTI through class presentations
   • Preparing students for residency placement
9. Provide instructional material and presentations on preparation for residency placement
10. Providing faculty development programs

ACREDITATION
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 is currently accredited through 2016. To review accreditation, approval, or licensing documentation, please contact the Dean’s office 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.

DEGREE DESCRIPTION
Upon graduation from 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. Completion from a program of study at Midwestern University does not guarantee placement in a residency program or future employment, licensure or credentialing.

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 GPAs and science GPAs over 3.00 on a 4.00 scale
   • To receive a supplemental application, students must have minimum science and cumulative 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 2013 was 29
   - Only MCAT exam scores earned from tests taken no more than 3 years prior to the planned enrollment year are acceptable
   - Register for MCAT tests through the MCAT Program Office at 202/828-0690 or visit www.aamc.org/students/applying/mcat for information

4. Two letters of recommendation
   - One letter from either a premedical advisory committee, prehealth advisor or basic science professor who has taught the applicant
   - Second letter from either a U.S. licensed D.O. or M.D. Letters from osteopathic physicians are strongly recommended. Letters written by immediate family members are not acceptable
   - Letters of recommendation must be submitted by the evaluator. Letters submitted by students are not accepted.

5. Demonstration of sincere understanding and interest in osteopathic medicine

6. Demonstration of a people- or service-orientation through community service or extracurricular activities

7. Motivation for and commitment to health care as demonstrated by previous work, volunteer work, or other life experiences

8. Oral and written communication skills necessary to interact with patients and colleagues

9. Passing the Midwestern University fingerprint-based background check

10. Commitment to abide by Midwestern University Drug-Free Workplace and Substance Abuse Policy

11. Meet the Technical Standards of the College

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 2013, CCOM received more than 6,900 applications for its 206 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.

Admissions Course Requirements

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>General Chemistry with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>Organic Chemistry with Lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>Physics with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>English Composition</td>
<td>6 Semester/9 Quarter hours</td>
</tr>
</tbody>
</table>

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

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

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 1, 2015 Deadline**
   To initiate the application process, all applicants must apply online via the centralized application service administered by AACOM at https://aacomas.aacom.org/. The AACOMAS application is typically available in early June. As part of this process, students must submit official MCAT scores (for tests taken no earlier than 2011) 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 1.

2. **CCOM Supplemental Application - March 1, 2015 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 overall GPAs 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 1, 2015.

3. **Letters of Recommendation - March 1, 2015 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 has taught the applicant. The second letter must be written by a physician, either a 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 1, 2015. Letters must adhere to the following guidelines:
   A. The full legal name and AACOMAS ID number of applicants must be on the front page of the recommendation. The applicant provide this information to the evaluators.

4. **Completed Applications - March 1, 2015 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 1, 2015. Only completed applications received by the Office of Admissions on or before the deadline date will be reviewed for potential Fall 2015 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 file 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 web site. Instructions for accessing application information on the University’s web site 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 AACOMA’s 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. After 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. Team members question applicants about their academic, personal, and health care preparedness for medical school, and they rate applicants on a standardized evaluation form relative to each variable. At the conclusion of the interviews, the team 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.

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, 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 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 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 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 all personal qualities required during the educational process. The candidate must agree to experience touching/palpating and being touched/palpated by individuals of either gender as defined in the College’s curricular requirements.

Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean, will identify and discuss what accommodations, if any, the College would need to make that would allow the candidate to complete the curriculum. 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.

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. Applicants 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 CCOM. Applicants 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. Applicants who fail to submit all completed medical files by the stated deadline may jeopardize their acceptance or continued enrollment in the College.

4. Meet the Technical Standards for CCOM.

5. Submit proof of medical and disability insurance coverage. Applicants 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. Applicants who fail to submit proof of coverage by the stated deadline may jeopardize their acceptance or continued enrollment in the College.

6. Submit additional documents as requested by the Office of Admissions or CCOM.

7. Applicants who are requesting an I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University. Applicants who are accepted for matriculation in the 2014 academic year may request a formal waiver of this policy by submitting a letter to the Director of Financial Services. The letter must include sufficient documentation that the student has deposited in U.S. Bank Account sufficient funds to cover the costs for tuition and fees that are available during the entire length of the program. All requests for waivers will be reviewed and determined by the Senior Vice President and Chief Financial Officer of Midwestern University. If a request for waiver is denied, the decision will be reviewed by the President and Chief Executive Officer of Midwestern University.

8. Submit a signed Credit Policy Statement.

9. Authorize and pass the MWU criminal background check and fingerprinting background check as required by CCOM. Applicants who fail to pass background checks by the stated deadline may jeopardize their acceptance or continued enrollment in the College.

10. Submit a signed MWU Drug-Free Workplace and Substance Abuse Policy Statement.

An applicant who fails to satisfy these matriculation requirements or who omits or falsifies information required on official admission documents automatically forfeits his/her admission to CCOM. Any individual accepted for admission to CCOM who does not comply with stated timelines for submission of all required materials receives no further notification from CCOM regarding the forfeiture of his/her admission.

Commitments Made Prior to Matriculation at CCOM

Students who have made commitments prior to their matriculation at CCOM must be aware there may be curricular priorities that are 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 that time off for prior commitments will be approved.

Dual Admission Program

Dual admission programs are currently in effect with the Illinois Institute of Technology and the University of St. Francis, Fort Wayne, IN. Details of these programs are 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 their transfers. 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.

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 sent 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:
   a. Transcripts from the COM
   b. Class rank (must be in top 50%)
   c. Dean’s letter verifying "Good Academic Standing"
   d. A letter of reference from the Dean of Students
5. 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. Applicants are notified by the Dean, through the Office of Admissions, of the final transfer decision.

**Graduation Requirements**
The degree Doctor of Osteopathic Medicine is conferred upon candidates of good moral character who have 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.

**Licensure Requirements**
Licensure for the practice of medicine is granted on a state-by-state basis. Graduates of Chicago College of Osteopathic Medicine qualify 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.

**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 structures and functions 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 health care. In recognition of this approach, CCOM has developed, and continues to refine, a four-year curriculum that educates students in the biopsychosocial approach to patient care, as well as the basic medical arts and sciences.

Within this curricular format, CCOM students spend their first two years completing a rigorous basic science curriculum and preparing for their clinical studies, including early clinical contact experiences. During their third and fourth years, students rotate through a variety of clinical training sites accruing an impressive 92 weeks of direct patient care experience. By stimulating intellectual curiosity and teaching problem-solving skills, the CCOM curriculum encourages students to regard learning as a lifelong process.

**Total Curricular Hours**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>70.95</td>
</tr>
<tr>
<td>Second Year</td>
<td>69</td>
</tr>
<tr>
<td>Third Year</td>
<td>73</td>
</tr>
<tr>
<td>Fourth Year</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td>289.95</td>
</tr>
</tbody>
</table>

**Note:** The Chicago College of Osteopathic Medicine reserves the right to alter its curriculum however and whenever it deems appropriate.

* Electives in 1st and 2nd years are optional. There are 20 weeks of mandatory electives in the 3rd and 4th years.

**First Year**

**Year Total**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1550</td>
<td>6.5</td>
</tr>
<tr>
<td>ANAT 1511</td>
<td>4</td>
</tr>
<tr>
<td>BIOC 1500</td>
<td>2</td>
</tr>
<tr>
<td>BIOC 1501</td>
<td>4</td>
</tr>
<tr>
<td>CORE 1599</td>
<td>1</td>
</tr>
<tr>
<td>CLIN 1550</td>
<td>2.5</td>
</tr>
<tr>
<td>CLIN 1501</td>
<td>4.7</td>
</tr>
<tr>
<td>CLIN 1551</td>
<td>.75</td>
</tr>
<tr>
<td>OMED 1550</td>
<td>1</td>
</tr>
<tr>
<td>OMED 1551</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27.95</td>
</tr>
<tr>
<td>Winter Quarter (10 weeks)</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---</td>
</tr>
<tr>
<td>ANAT 1550</td>
<td>Gross Anatomy/Embryology 6.5</td>
</tr>
<tr>
<td>BIOC 1502</td>
<td>Biochemistry 5</td>
</tr>
<tr>
<td>CLIN 1500</td>
<td>Health Care Communication I 1</td>
</tr>
<tr>
<td>CLIN 1550</td>
<td>Patient Symptom Presentations 2.5</td>
</tr>
<tr>
<td>CLIN 1551</td>
<td>Physical Exam Skills .75</td>
</tr>
<tr>
<td>OMED 1550</td>
<td>Osteopathic Manipulative Medicine - Lecture 1</td>
</tr>
<tr>
<td>OMED 1551</td>
<td>Osteopathic Manipulative Medicine - Workshop 1.5</td>
</tr>
<tr>
<td>PHYS 1501</td>
<td>Physiology I 5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter (10 weeks)</th>
<th></th>
<th></th>
<th>Spring Quarter (10 weeks)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1521</td>
<td>Neuroscience 8</td>
<td></td>
<td>CLIN 1650</td>
<td>Clinical Symptom Integration 5</td>
<td></td>
</tr>
<tr>
<td>CLIN 1550</td>
<td>Patient Symptom Presentations 2.5</td>
<td></td>
<td>CLIN 1651</td>
<td>Simulated Patient Care 1.5</td>
<td></td>
</tr>
<tr>
<td>CLIN 1551</td>
<td>Physical Exam Skills .75</td>
<td></td>
<td>OMED 1650</td>
<td>Osteopathic Manipulative Medicine - Lecture 1</td>
<td></td>
</tr>
<tr>
<td>OMED 1550</td>
<td>Osteopathic Manipulative Medicine - Lecture 1</td>
<td></td>
<td>OMED 1651</td>
<td>Osteopathic Manipulative Medicine - Workshop 1.5</td>
<td></td>
</tr>
<tr>
<td>OMED 1551</td>
<td>Osteopathic Manipulative Medicine - Workshop 1.5</td>
<td></td>
<td>PATH 1603</td>
<td>Pathology III 5</td>
<td></td>
</tr>
<tr>
<td>PHYS 1502</td>
<td>Physiology II 5</td>
<td></td>
<td>PHAR 1650</td>
<td>Pharmacology 2</td>
<td></td>
</tr>
<tr>
<td>PSYC 1503</td>
<td>Psychiatry I 2</td>
<td></td>
<td>PSYC 1605</td>
<td>Psychiatry II 2</td>
<td></td>
</tr>
<tr>
<td>Electives *</td>
<td></td>
<td></td>
<td>Electives *</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19.75</td>
<td></td>
<td><strong>Total</strong></td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th></th>
<th></th>
<th>Third Year (12 months)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Total</td>
<td>69</td>
<td></td>
<td>Year Total</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Quarter (14 weeks)</th>
<th></th>
<th></th>
<th>Third Year (12 months)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIN 1650</td>
<td>Clinical Symptom Integration 5</td>
<td></td>
<td>CLIN 1700</td>
<td>Clinical Performance Evaluation 1</td>
<td></td>
</tr>
<tr>
<td>CLIN 1651</td>
<td>Simulated Patient Care 1.5</td>
<td></td>
<td>CLRO 1700</td>
<td>Elective I 6</td>
<td></td>
</tr>
<tr>
<td>MICR 1601</td>
<td>Immunology 3</td>
<td></td>
<td>FMED 1702</td>
<td>Family Medicine Rotation/Community Health 18</td>
<td></td>
</tr>
<tr>
<td>MICR 1650</td>
<td>Infectious Diseases and Their Etiologic Agents 5</td>
<td></td>
<td>IMED 1702</td>
<td>Internal Medicine Rotation I 12</td>
<td></td>
</tr>
<tr>
<td>OMED 1650</td>
<td>Osteopathic Manipulative Medicine - Lecture 1</td>
<td></td>
<td>OBGY 1702</td>
<td>Obstetrics and Gynecology Rotation 9</td>
<td></td>
</tr>
<tr>
<td>OMED 1651</td>
<td>Osteopathic Manipulative Medicine - Workshop 1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATH 1601</td>
<td>Pathology I 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHAR 1650</td>
<td>Pharmacology 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td></td>
<td><strong>Total</strong></td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>
PEDI 1702 Pediatrics Rotation 9
PSYC 1702 Psychiatry Clerkship 6
SURG 1702 Surgery Rotation I 12
Total 73

Fourth Year Rotation

Year Total 68

Fourth Year Rotations (12 months) (Option 1)

CLIN 1800 Integrated Clinical Activities (ICA) 2
CLRO 1800 Elective Rotations II-VI 36
EMED 1805 Emergency Medicine Rotation 6
FMED 1802 Family Medicine 6
IMED 1802 Internal Medicine Rotation II 6
OMED 1801 Osteopathic Manipulative Medicine Rotation 6
SURG 1802 Surgery Rotation II 6
Total 68

Fourth Year Rotations (Option 2)

CLRO 1800 Elective Rotations II-VI 36
EMED 1805 Emergency Medicine Rotation 6
CLIN 1800 Integrated Clinical Activities (ICA) 2
OMED 1801 Osteopathic Manipulative Medicine Rotation 6
IMED 1802 Internal Medicine Rotation II 12
SURG 1802 Surgery Rotation II 6
Total 68

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 all three quarters of their second year. Failures in elective courses carry the same weighting as failures in core curriculum courses such as anatomy, biochemistry, etc.

The specific list of electives offered will vary:

- Advanced Studies in OMM
- Beyond the Bench/Beyond the Bench Part I, II
- Cardiovascular Pharmacology
- Career Development
- Clinical Nutrition
- Clinical Problem Solving
- Health Policy Elective
- Medical Simulation
- Medical Spanish
- Nutrient and Drug Biomembrane Transport
- Osteopathic Clinical Research
- Physiology Teaching Assistant
- Research Design
- Student Research Elective
- Understanding America’s Underserved

Clinical Rotations

Core rotations are required and include 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. These rotations cannot be done at out-of-system sites.

Students must also complete elective rotations in recognized fields of medicine. Examples of rotations include:

- anesthesiology, cardiology, family medicine, dermatology, gastroenterology, hematology/oncology, infectious disease,
- nephrology, neurology, neurosurgery, nuclear medicine/endocrinology/metabolism, obstetrics/gynecology,
- ophthalmology, orthopedic surgery, otolaryngology, pathology, rheumatology/immunology,
- cardiovascular/thoracic surgery, and urology (division of community medicine and/or division of osteopathic manipulative medicine).

Students may pursue elective clinical rotations at other osteopathic, allopathic, or military institutions. 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 clerkship policies. Some elective rotations in the same specialty categories may be limited to 12 weeks.

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, osteologic 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 to apply and reinforce basic concepts.

The Department offers several elective courses, including Advanced Gross Dissection and Research. 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; paleoanthropology and biomechanics; neuronal injury mechanisms during stroke or seizures; plasticity of the peripheral nervous system during development and adulthood; neuroplasticity and recovery of function following ischemic stroke; and the inflammatory response and how it is affected by alcohol.

**Department of Behavioral Medicine**

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 Medicine curriculum provides the coursework and clerkship 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**

First-year medical students complete a two-quarter sequence of three required courses in Medical Biochemistry, the educational goals of which are to understand the major biochemical concepts of cell, tissue, and organ function in health and diseases. These goals are achieved through lecture sessions, simulated patients, small group case studies, and readings in the biomedical literature. A problem-based format is used for small group clinical case studies. In addition to the required 1500-1502 courses, the Biochemistry faculty teaches three elective courses: Clinical Nutrition, Research Design, and Nutrient and Drug Biomembrane Transport. Faculty members also accept students into a research elective program.

**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 College’s core emergency medicine rotation provides 4th year medical students with didactic training in emergency medicine. At CCOM, emergency medicine is taught in the emergency departments of core hospitals under the supervision of board certified emergency physicians and emergency medicine residents. Students are exposed to a full range of clinical pathology presenting to both inner city and suburban emergency departments. A formal weekly didactic program on campus complements their clinical exposure.

The members of the Department of Emergency Medicine are all specialists in the field of emergency medicine. They are engaged in both the 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 practitioners 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. Thus, all medical students must have extensive experiences in this area. 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.

Family Medicine provides staff who act as models for group practices where osteopathic medical students gain clinical experience. As externs in CCOM affiliate facilities, medical students are responsible for taking a patient’s history and conducting a physical. They learn how to provide the holistic health care for patients coming to these facilities. Students also work in community outreach programs. Medical students have the opportunity to be members of a health care team. These programs include health screening, school health programs, and health promotion and illness prevention programs for community groups and organizations.

Members of the Department of Family Medicine are actively engaged in clinical studies. Students can assist the clinicians in teaching patients through these studies. 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. The course of study includes osteopathic history, philosophy, and principles, the somatic components of disease, examination, treatment, and problem-solving skills.

**Section of Pediatrics**

Pediatric patients present opportunities, challenges, and rewards that are unique in medicine. As a student it is essential to be exposed to growth and development from newborn to adulthood, the medical management of the pediatric patient, preventive care and psychosocial issues of
childhood. The management of pediatric patients requires special thought processes, skills, and techniques that must be mastered by all medical students. Pediatrics is a six-week rotation in the third year.

**Department of Internal Medicine**

*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 sciences into their practice of clinical medicine. The medical students can gain significant ambulatory experience in the 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 specialists, sub-specialists, or general internists, are engaged in clinical as well as basic research. The sections of cardiology, gastroenterology, and rheumatology are actively involved in research and investigative pharmaceutical studies. The medical students may assist in these projects by monitoring the patient’s progress and helping to analyze the data collected for these studies. Consistent with our osteopathic principals, 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.

*Section of Radiology*

Imaging techniques are becoming increasingly important in the diagnosis of many patient problems. This course is designed to increase the medical students’ understanding of the basic elements of radiology so that as physicians they can effectively utilize the current technologies as well as the consultant services offered by radiologists. After completion of this course, the students possess an understanding of the basic physics of radiation and are able to both accurately interpret common radiographic findings and demonstrate an understanding of indications of the various radiologic studies.

**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 course sequence in Medical Immunology and Infectious Diseases and their Etiologic Agents (IDEA). The goals of this sequence are to provide students with the fundamental information necessary for the diagnosis, rational management, treatment options and control of infectious disease as well as an understanding of the role of the immune system in maintenance of a healthy host. Osteopathic principles are integrated in both courses. These goals are achieved through lectures, self-studies and problem-based interactive clinical case studies. The material presented in IDEA lecture is reinforced in the mandatory laboratory sessions that help students develop the skills they will find necessary to understand but not master the most commonly used microbiologic techniques ordered by a physician. The laboratory also allows students to become familiar with the general operations of a clinical microbiology laboratory. Problem based learning is used extensively in the laboratory. The material in Medical Immunology is reinforced by mandatory didactic clinical correlations and case presentations which are intended to be teacher-student interactive learning sessions.

In addition to the required courses, the Microbiology and Immunology faculty offer electives on request on the impact of social and geographic factors on infectious diseases and on agents of biological and chemical warfare and terrorism. Faculty also accept students into a research elective program. Areas of ongoing research include molecular and immunologic aspects of host-parasite interaction; immunopathological responses to infection, autoimmune diseases (rheumatoid arthritis and autoimmune uveitis); microbial adaptive mechanisms; latency in herpes virus infections, host factors related to the induction of antibiotic resistance; and, sexually transmitted diseases.

**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, the daily activities of an office gynecology, and the indications and options for appropriate surgical care of the female patient challenge all 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.

**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 will work 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**
By focusing on the human body as an integrated system, the study of pathology provides students with an understanding of the pathophysiologic mechanisms of disease while familiarizing them with the vast spectrum of human disease processes encountered through an organ system approach. It initiates students to critical clinical analysis by demonstrating the relationships between basic scientific principles and the practice of clinical medicine and emphasizing the integration of these principles into the study of human disease. This approach provides students with a complete overview of disease processes in relation to their genetic, pathophysiologic, anatomic, histologic, and cellular alterations. Students will develop skills necessary to interpret and incorporate laboratory data in diagnosing and treating the spectrum of illness. The relationships of the mechanisms and characteristics of human disease to osteopathic principles and practice are emphasized.

**Department of Pharmacology**
The science of pharmacology deals with the properties and effects of drugs and chemical compounds on living systems. Medical pharmacology focuses on the mechanisms of action, toxicities, and therapeutic uses of biologically active substances in humans. Physicians must be able to utilize basic knowledge of pharmacology to treat and prevent disease in their patients. At CCOM, medical students are shown the correlation between pharmacology and related medical sciences, taught how to interpret the actions and uses of major classes of drugs, and instructed in the applications of pharmacodynamics to therapeutics.

**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 responses that occur in response to perturbation of homeostasis 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 Summer Research Fellowship Program. Current research interests of the faculty include a variety of areas associated with cardiovascular physiology, such as cardiac electrophysiology, autonomic and enteric nervous system control and central control of cardiorespiratory function.

**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.

Students are required to complete an 8 week core general surgery block during their third year, and a 4 week core general surgery block during their fourth year. Additionally, the department of surgery offers elective surgical clerkships during the 3rd and 4th year. Clerkships are commonly four weeks long, but select sites offer two week experiences. Selective and elective surgery clerkships are offered in anesthesiology, orthopedics, general surgery, burn surgery, trauma surgery, ophthalmology, plastic surgery, vascular surgery, cardio-thoracic surgery, surgical critical care, surgical oncology, ENT, urologic surgery and neurosurgery.

Students are expected to attend all department educational seminars, case presentations and grand rounds. Successful completion of the clerkship is dependent upon the preceptor evaluation, daily attendance and completion of patient care logs. All students must pass the post rotation exam in order to successfully complete the third year core clerkship.

All clerkships are offered at CCOM affiliated hospitals, surgery centers and clinics.
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 of the department that delivers the course.

ANAT 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.
4 credits

ANAT 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.
8 credits

ANAT 1550 Gross Anatomy/Embryology
In Gross Anatomy and Embryology, students will study the human body in a regional approach. Through lectures, dissection laboratories, and case studies, 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 malformations. This course is taught during the Fall and Winter quarters with a single grade given at the completion of the course.
6.5 credits Fall Quarter
6.5 credits Winter Quarter
13 credits total

BIOC 1500 Biochemistry
The Introduction to Evidence-Based Medicine course features general concepts of fuel metabolism, bioenergetics and medical statistics as they apply to patient care through the life cycle. A simulated patient helps to illustrate major concepts in the course. Students work in teams to apply their knowledge of medical biochemistry and statistics to the solution of clinical problems. Team discussions also help students begin to develop relationship-centered as well as evidence-based practices even at this early stage of their medical training.
2 credits

BIOC 1501 Biochemistry
The Human Clinical Chemistry and Metabolism course lecture sessions concern clinical chemistry, human metabolism and biochemical abnormalities of simulated patients. Clinical correlations are featured in all lecture sessions and are applied in workshops that involve weekly small group discussions of related cases.
4 credits

BIOC 1502 Biochemistry
The Human Cell and Molecular Biology Genetics and Nutrition course lecture sessions highlight human nutrition, cell and molecular biology and medical genetics. Simulated patients help to illustrate major concepts in lecture sessions. Clinical correlations are featured in all lecture sessions and are applied in workshops that involve weekly small group discussions of related cases.
5 credits

CORE 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

EMED 1805 Emergency Medicine Rotation
In the emergency departments of CCOM’s affiliate hospitals, the medical students, under the direction of a member of the department, assist in providing emergency care. The 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 lab and weekly lectures are part of the rotation.
6 credits

CLIN 1500 Health Care Communication I
This course 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

CLIN 1550 Patient Symptom Presentations
Patient Symptom Presentations acquaints osteopathic medical students with the clinical knowledge associated with the practice of medicine, enabling them to integrate the knowledge gained in the basic science courses into a patient’s presenting symptoms. As part of the required activities, students participate in discussions about symptom-based presentations of simulated patients. This course is taught by practicing osteopathic physicians during the Fall, Winter and Spring quarters with a single grade given at the completion of the course.

2.5 credits

CLIN 1600 Patients, Physicians and Society
This course focuses on the physician-patient relationship and communication in relation to knowledge-base information and skill-base experiences. Specific concepts that are essential in effective communication, such as empathy, rapport building, active listening, and data gathering techniques are discussed. The foundation for this course is the biopsychosocial model of medicine. This model is a comprehensive approach in which all of the major aspects of the patient are explored to enhance clinical practice. The course examines how to effectively manage the many challenges in patient care and provide the most effective treatment for the patient.

1 credit

CLIN 1650 Clinical Symptom Integration
Clinical Symptom Integration builds upon and reinforces content taught in the first year with a focus on symptoms that prompt patients to seek medical care. Within this class, the students are guided to a higher level of clinical thinking. Presentations from primary care physicians as well as specialists incorporate prior academic subject material and build upon it with a clinical focus. This course consists of presentations coordinated and conveyed sequentially during the Fall, Winter, and Spring. A single grade is given at the completion of the course.

5 credits

CLIN 1651 Practice of Medicine
Simulated Patient Care workshop builds upon and reinforces information presented in the Clinical Symptom Integration class with a focus on actual patient care skills. Actual patients as well as Standardized Patients are incorporated into the course. The class focuses on problem solving and the development of skills necessary for the transition to the clinical rotations. This course is taught by practicing osteopathic physicians during the Fall, Winter, and Spring quarters with a single grade given at the completion of the course.

1.5 credits

FMED 1702 Family Medicine Rotation/Community Health
Medical students complete a 12-week rotation during their junior 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 that the student physician is exposed to the more common disorders encountered in an ambulatory care setting. Students are required to be able, 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.

18 credits

FMED 1802 Family Medicine
This experience provides the medical students with one four-week rotation that enables them to continue the process of developing skills in an ambulatory care setting. The intention is to place the fourth-year medical student in a somewhat more intense ambulatory care setting with a patient population that includes patients with more advanced pathologies. The requirement of heightened diagnostic skill as well as increased ability to deal with more serious and complex medical issues result in further development of the student’s ability in history taking and physical diagnosis and the development of more complex differential diagnoses and treatment plans. Students may participate in the community medicine experience, a community-based family medicine–run outreach program that involves care of the homeless, family planning, adolescent medicine, and ambulatory geriatric care. Students may elect to participate in the Rural Preceptorship Program. This program is available to students who may be interested in either establishing a family medicine practice in a rural area or participating in primary health care without access to the technologically advanced services available in large urban medical communities. Students in this program complete a four-week rotation with a faculty member of the Family Medicine Department who is engaged in a private family medicine practice in downstate Illinois, northern Indiana, or Wisconsin. Most of these sites offer housing and/or other support for medical students during the rural preceptorship experience.

6 credits

CLIN 1800 Integrated Clinical Activities (ICA)
This course provides a series of educational presentations, workshops and performance experiences in between the MS
III and MS IV years. The primary purposes of this program are to enhance learning, provide additional clinical review material and assist in the preparation for postdoctoral training. ICA provides a broad range of topics to assist students as they plan for upcoming residency matching processes. Students are required to articulate diagnosis and management of a variety of complex medical issues, outline the major medicolegal issues faced by physicians in practice and understand the residency selection process.

2 credits

IMED 1501 History of Medicine
No physician would consider treating a patient without first obtaining a detailed history, yet too many physicians are unable to turn to historical precedents for guidance in their work because they are unaware of the history of their own profession. It is no accident that in the last 100 years the most influential and original thinkers in medicine also had a sense of history as well as an appreciation for the history of medicine. This course analyzes the development of the osteopathic medical profession and traces the evolution of medical concepts and beliefs. After exploring the practice of medicine in classic antiquity (including the Middle East, India, China, and Japan), the medical students study the beliefs and opinions of the great physicians who were responsible for the development of western medicine from its Greco-Roman origins through the rise of American Medicine in the 20th century. With this course as a basis, the medical students will be able, as physicians, to evaluate issues and trends in medicine. Additionally, they will be able to assess the ways in which changes in the practice of medicine affect other elements of society.

1 credit

IMED 1702-1802 Internal Medicine Rotation I - II
In these rotations, medical students participate in daily teaching rounds and attend all teaching lectures and conferences. The medical students also conduct in-depth studies on assigned cases. The medical students are evaluated, in part, on their ability to collect and analyze data and solve problems. A symptom-based lecture series is also offered weekly. On-line teaching material is offered such as clinical cases, instructional physical examination videos as well as lectures from the internal medicine course.

IMED 1702 - 12 credits
IMED 1802 - 6-12 credits

MICR 1601 Immunology
This didactic course covers basic antigenic characteristics of microorganisms with special emphasis on: factors pertinent to clinical medicine; vaccination and immunotherapy; fundamental principles of immunology, lymphatic recirculation and lymphatic flow; the cells and cell products involved in host defense mechanisms, their origin, function, role in health, in infectious processes and in immunologic disorders; hypersensitivities, and deficiencies; basic strategies of host defense related to combating various categories of pathogens; and, methods of laboratory diagnosis using antigen and antibody-based tests. Each didactic lecture unit is followed by case presentations that highlight the important clinical aspects of the basic material covered for that unit.

3 credits

MICR 1650 Infectious Diseases and Their Etiologic Agents
In this course, there is an introductory unit on basic classification, structure, metabolism and genetics of bacteria, viruses and fungi. The students are then presented with information relative to control of microorganisms to include sterilization and disinfection, antibiotics, antifungals and antivirals followed by infectious disease epidemiology. For the remainder of the course, lectures and laboratories use the organ systems approach to examine the etiologic agents of infectious disease. Clinical correlations are featured for each organ system and are applied to the laboratory portion of the course. This course is taught during the Fall and Winter quarters with a single grade given at the completion of the course.

10 credits

OBGY 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; 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; 4) ample one-on-one supervision by residents and attending physicians enhances each student’s learning process; 5) formal lecture series covering all major topics in the specialty; and 6) Blackboard® 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 to demonstrate the integration of OPP/OMM into women’s health care by students and residents together. An orientation session and final exam are integral to the organization and evaluation process in the OB/Gyne rotation.

9 credits
The first year OMM curriculum is divided into two year-long component courses: a lecture course (OMED 1550) and a workshop course (OMED 1551). While workshop sessions are designed to reinforce material presented in lectures, each course is graded independently. The lecture course (one hour weekly) covers the didactic study of osteopathic principles and theory. The workshop course (three hours weekly) focuses on each student’s ability to identify and develop the manual skills needed to diagnose and treat patients from an osteopathic standpoint. Workshop sessions provide an excellent opportunity for medical students to ask questions and to practice diagnosis and treatment techniques on a variety of body types. High definition cameras and flat screen monitors are used to enhance the effectiveness of demonstrations. Instruction begins with foundational material such as history, terminology, basic anatomy, and approach to the patient. As the first year progresses, students learn the importance of the somatic component as it relates to the patient’s presentation. There is a significant emphasis placed on accurate diagnosis of somatic dysfunction. Each week during workshop new manipulative treatment modalities are introduced. Many workshop sessions are taught in small groups utilizing a patient presentation based format. The following manipulative medicine approaches are taught during the first year: Articulation, Range of Motion procedures, Muscle Energy method, Cranial Osteopathy, Counterstrain method, Myofascial Release method, and High Velocity Thrust (HVLA) method. Neurobiological mechanisms in manipulative treatment and their clinical manifestations are also presented. At the conclusion of the first year, medical students are expected to have mastered palpation, diagnosis, and simple basic manipulative procedures. Multiple written examinations and practical examinations are administered throughout the academic year to evaluate student competency in the above mentioned skills. These courses are taught during the Fall, Winter, and Spring quarters with a single grade given at the completion of the course.

OMED 1550 - 3 credits (1 credit Fall Quarter, 1 credit Winter Quarter, 1 credit Spring Quarter)
OMED 1551 - 4.5 credits (1.5 credits Fall Quarter, 1.5 credits Winter Quarter, 1.5 credits Spring Quarter)

Prerequisites: Satisfactory completion of OMED 1550, 1551 and Anatomy 1550, 1521

OMED 1650, 1651 Osteopathic Manipulative Medicine
The second year OMM curriculum is divided into two year-long component courses, a lecture course (OMED 1650) and a workshop course (OMED 1651). While workshop sessions are designed to reinforce material presented in lectures, each course is graded independently. The lecture course (one hour weekly) covers the didactic study of osteopathic principles and theory. The workshop course (three hours weekly) focuses on each student’s ability to identify and develop the practical skills needed to diagnose and treat patients from an osteopathic standpoint. Workshop sessions provide an excellent opportunity for medical students to ask questions and to practice diagnosis and treatment techniques on a variety of body types. High definition cameras and flat screen monitors are used to enhance the effectiveness of demonstrations. The second year curriculum is an expansion of the first year curriculum, with a dominant focus on organ systems as contrasted to anatomic regions. A complete spectrum of direct and indirect osteopathic manipulative methods is taught. At the conclusion of the second year, medical students are expected to have mastered diagnosis, advanced manipulative procedures, and the ability to formulate a treatment plan for patient complaints in the clinical setting. Multiple written examinations and practical examinations are administered throughout the academic year to evaluate student competency with the above mentioned skills. These courses are taught during the Fall, Winter, and Spring quarters with a single grade given at the completion of the course.

OMED 1650 - 3 credits (1 credit Fall Quarter, 1 credit Winter Quarter, 1 credit Spring Quarter)
OMED 1651 - 4.5 credits (1.5 credits Fall Quarter, 1.5 credits Winter Quarter, 1.5 credits Spring Quarter)

Prerequisites: Satisfactory completion of OMED 1550, 1551, 1650 and Anatomy 1550, 1521

PATH 1601 Pathology I
The first half of the 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 for the processes of cellular injury and adaptation, inflammation and repair, neoplasia, hemodynamic disorders and basic laboratory values and analysis. This section of the course stresses the cellular, genetic, pathophysiologic and molecular alterations which underlie all disease processes and emphasizes their dynamic nature. The second half of the course introduces students to
the study of specific disease processes utilizing an organ systems approach.

5 credits

**PATH 1602, 1603 Pathology II and III**
These courses are a continuum of the organ system approach to the study of human disease introduced in Pathology 1601. The causes and pathophysiologic mechanisms of disease pertaining to specific organ systems are emphasized along with their anatomic, histologic and physiologic alterations. The implications of these disease processes to both the patient and physician are examined. The relationships between specific organ system diseases and their systemic implications are also emphasized.
PATH 1602 - 6 credits
PATH 1603 - 5 credits

**PEDI 1702 Pediatrics Rotation**
This 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, and didactic sessions. Attendance at all clinical and educational opportunities is mandatory.
9 credits

**PHAR 1650 Pharmacology**
This course begins with coverage of the general principles of pharmacology; the kinetics of drug absorption, distribution, metabolism, and elimination; mechanisms of drug actions; receptor theory and dose response relationships. The remainder of the course includes coverage of the pharmacologic actions and clinical uses 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 diseases and neoplastic diseases, drugs acting on blood and blood-forming organs, hormones and hormone antagonists, principles of toxicology, vitamins, and drugs causing birth defects. Throughout the instructional program emphasis is placed on problem solving, formulating hypotheses, making therapeutic decisions, and the application of principles of osteopathic philosophy and evidence-based medicine. This course is taught during the Fall, Winter and Spring quarters with a single grade given at the completion of the course.
10 credits (4 credits Fall Quarter, 4 credits Winter Quarter, 2 credits Spring Quarter)

**PHYS 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.
5 credits

**PHYS 1502 Physiology II**
This course is a sequel to Physiology 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 credits

**PSYC 1503 Psychiatry I**
This module introduces psychopathology with descriptive, dynamic, and behavioral analyses of typical psychiatric syndromes. Emphasis is on etiology, diagnosis, and treatment. The use of the Diagnostic and Statistical Manual of Mental Disorders as the major diagnostic reference is presented.
2 credits

**PSYC 1605 Psychiatry II**
This module focuses on major psychiatric issues and mental health problems that individuals often confront such as substance abuse, addiction, cognitive disorders, death, bereavement, mental retardation, developmental disorders, and psychiatric factors associated with medical conditions. The course also addresses the biological therapies as well as legal issues associated with psychiatric practice.
2 credits

**PSYC 1702 Psychiatry Clerkship**
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 the clinical experiences. A
series of didactics including lectures and demonstrations facilitate this process.
6 credits

**SURG 1702, 1802 Surgery Rotation I and II**
The core clerkships in surgery are intended to expose students to a broad scope of surgical disease, to allow them to
develop the critical skills necessary to manage surgical patients, and to broaden their technical expertise with
procedural tasks. The entire core experience is twelve weeks with eight weeks in the third year and four weeks in the
fourth year. General surgery remains the cornerstone of the core clerkship. It is supplemented by two surgical
subspecialty rotations, one in the third year and one in the fourth year. Subspeciality choices include: orthopedics, ENT,
ophthalmology, neurosurgery, anesthesiology, trauma surgery, burn surgery, plastics and reconstructive surgery,
cardiovascular and vascular surgery, and urological surgery. All clerkships are at CCOM affiliated hospitals and clinical
sites. Clerkships are designed around both ambulatory and in-patient settings. The 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 extensive didactic lecture 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. Successful completion of the clerkship is
dependent upon the preceptor evaluation, attendance of all core lectures, and completion of all quizzes. Passage of the
final shelf exam is required for successful completion of the clerkship.
SURG 1702 - 12 credits
SURG 1802 - 6 credits

**CLRO 1800 Elective Clinical Clerkship**
Students have 28 total weeks of electives, 4 weeks in the third year and 24 weeks in the fourth year. 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 may be used for an international rotation and two 4-week electives may be used for vacation. A
student must complete 5 electives (20 weeks) to meet graduation requirements.
30 credits

**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
www.midwestern.edu/programs-and-admission/il-osteopathic-medicine.html

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 postgraduate training. Internship, 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 that focuses on primary care.
With unique predoctoral and postdoctoral teaching and training opportunities at some of the finest health care
facilities in the Midwest as well as the country, CCOM and MWU/OPTI affiliated hospitals consistently lead the nation
in terms of cutting edge technology, treatment, and care.

MWU/OPTI postdoctoral programs include residencies in all primary disciplines, fellowship programs in many
subspecialties and traditional internships. Programs follow the guidelines of and receive accreditation from the Bureau of

Residency or fellowship training is offered through MWU/OPTI in the following disciplines:
Cardiology
Critical Care
Dermatology
Emergency Medicine
Family Medicine/Osteopathic Manipulative Medicine
Gastroenterology
General Surgery
Hematology/Oncology
Internal Medicine
Interventional Cardiology
Neuromuscular Medicine
Neurosurgery
Obstetrics/Gynecology
Orthopedic Surgery
Pulmonary Critical Care
Radiology
Rheumatology
Urological Surgery
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 Review & Progression
The Promotions Committee at the medical school reviews the academic performance of students for the preclinical years and the clinical years.

Promotions Committee Guidelines*

<table>
<thead>
<tr>
<th>Course or Clinical Rotation</th>
<th>Usual Action</th>
<th>Academic Status</th>
<th>Retake Course</th>
<th>Action Following Retake</th>
</tr>
</thead>
<tbody>
<tr>
<td>All passed</td>
<td>Promote</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1 Failure equivalent</td>
<td>Retake Course</td>
<td>Warning</td>
<td>Summer or Next</td>
<td>Fail – ESP**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Academic Year</td>
<td>Pass - Promote</td>
</tr>
<tr>
<td>2 Failure equivalents</td>
<td>Retake Course</td>
<td>Warning or</td>
<td>Summer or Next</td>
<td>Fail – ESP**</td>
</tr>
<tr>
<td>(different quarters)</td>
<td></td>
<td>Probation</td>
<td>Academic Year</td>
<td>Pass - Promote</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Failure equivalents</td>
<td>ESP or Suspension</td>
<td>Probation</td>
<td>Summer or Next</td>
<td>Fail – ESP** or</td>
</tr>
<tr>
<td>(same quarter)</td>
<td></td>
<td></td>
<td>Academic Year</td>
<td>Dismiss</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pass-Promote</td>
</tr>
<tr>
<td>3 Failure equivalents</td>
<td>ESP or Suspension</td>
<td>Probation</td>
<td>Next Academic Year</td>
<td>Fail – Dismiss</td>
</tr>
<tr>
<td>(over &gt; 1 academic year)</td>
<td></td>
<td></td>
<td></td>
<td>Pass-Promote</td>
</tr>
<tr>
<td>3 Failure equivalents</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(same academic year) or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Cumulative Failure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equivalents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One rotation/course failure</td>
<td>Repeat rotation/course</td>
<td>Academic Warning</td>
<td>Fail - Probation, Repeat</td>
<td></td>
</tr>
<tr>
<td>with 0, 1, or 2 failure-</td>
<td></td>
<td>or Probation***</td>
<td>of Academic Year or</td>
<td></td>
</tr>
<tr>
<td>equivalents in MSI/II years</td>
<td></td>
<td></td>
<td>Dismiss</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pass - Promote or</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Graduate</td>
<td></td>
</tr>
<tr>
<td>One rotation/course failure with 3 or more failure-equivalents in MSI/II years</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 rotation/course failures with 0 or 1 failure-equivalents in MSI/II years</td>
<td>Repeat rotation/course</td>
<td>Academic Probation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 rotation/course failures with 2 or more failure-equivalents in MSI/II years</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 rotation/course failures with 0 failure-equivalents in MSI/II years</td>
<td>Repeat Academic Year or Dismissal</td>
<td>Academic Probation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 rotation/course failures with 1 or more failure-equivalents in MSI/II years</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* May be modified by the Promotions Committee for reasons of additional consideration.

** Extended Study Program

*** Letters of academic warning will indicate that if another failure occurs the student will be placed on academic probation.

Failures in elective courses carry the same weighting as failures in core curriculum courses. Withdrawal/Failing (W/F) may be considered as a course failure by the Promotions Committee.

One "failure-equivalent": failing a single-quarter course with the grade assigned at the end of the quarter

Two "failure-equivalents": failing a two-quarter course with a single grade assigned at the end of the course

Three "failure-equivalents": failing a three-quarter course with a single grade assigned at the end of the course
## Promotions Committee Guidelines for Student on Extended Study Program ONLY*

<table>
<thead>
<tr>
<th>Basic Science Courses</th>
<th>Usual Action</th>
<th>Academic Status</th>
<th>Repeat Courses</th>
<th>Action Following Retake</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Passed</td>
<td>Promotion</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1 Failure-equivalent</td>
<td>Retake Course</td>
<td>Warning</td>
<td>Next Academic Year</td>
<td>Fail-Dismiss</td>
</tr>
<tr>
<td>2 Failure-equivalents</td>
<td>Recommend Dismissal</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* May be modified by the Promotions Committee for reasons of additional consideration.

Course repeat schedule is at the discretion of the Promotions Committee.
Failures in elective courses carry the same weighting as failures in core curriculum courses, such as anatomy, biochemistry, etc.
Withdrawal/Failing (W/F) may be considered as a course failure by the Promotions Committee.

## Promotions Committee Guidelines

<table>
<thead>
<tr>
<th>Clinical Rotation or Course</th>
<th>Usual Action</th>
<th>Academic Status</th>
<th>Action following Retake</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Passed</td>
<td>Promote or Graduate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One rotation/course failure with 0, 1, or 2 failure-equivalents in MSI/II years</td>
<td>Repeat rotation/course</td>
<td>Academic Warning or Probation**</td>
<td>Fail - Probation, Repeat of Academic Year or Dismissal Pass - Promote or Graduate</td>
</tr>
<tr>
<td>One rotation/course failure with 3 or more failure-equivalents in MSI/II years</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 rotation/course failures with 0 or 1 failure-equivalents in MSI/II years</td>
<td>Repeat rotation/course</td>
<td>Academic Probation</td>
<td>Fail – Repeat Academic Year or Dismissal Pass – Promote or Graduate</td>
</tr>
<tr>
<td>2 rotation/course failures with 2 or more failure-equivalents in MSI/II years</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 rotation/course failures with 0 failure-equivalents in MSI/II years</td>
<td>Repeat Academic Year or Dismissal</td>
<td>Academic Probation</td>
<td>Fail – Dismissal Pass – Promote or Graduate</td>
</tr>
<tr>
<td>3 rotation/course failures with 1 or more failure-equivalents in MSI/II years</td>
<td>Recommend Dismissal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* May be modified by the Promotions Committee for reasons of additional consideration.

** Letters of academic warning will indicate that if another failure occurs the student will be placed on academic probation.

*** Graduation additionally requires passing of COMLEX-USA Level 1 and Level 2CE and PE.
Unsatisfactory Evaluation in One or More Categories on Student Evaluation Form
When an unsatisfactory grade occurs in one or more categories on the evaluation form during a rotation, the student may be tracked for a period of three to twelve months based upon the increasing preponderance of unsatisfactory marks. The number of tracking months will reflect the extent of unsatisfactory marks. Tracking will necessitate notification of all departments receiving the student during the tracking period and the notification will include the areas of deficiencies that have been recognized. A request will be made to each department for close monitoring and any necessary remediation to take place to correct the deficiencies.

Academic Warning & Probation
Good academic standing is achieved by maintaining ≥ 70% cumulative average in all courses 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 and incur no further failures.

Academic warning is issued by the Associate Dean of Academic Affairs when a student has <C/failed a one failure-equivalent course or at any time during the academic year when a student has <70% in a course. 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 has a <70% cumulative average in a course is required to meet with the course director or course faculty to formulate a plan of action. A student who has a cumulative average <70% in more than one course is required to meet with the Associate Dean of Academic Affairs to formulate a plan to achieve academic success. The student will seek assistance from Student Services and/or a COMCoach as needed. Students on academic warning are discouraged from holding organizational offices.

Academic probation is defined as failure of ≥ 2 single-quarter courses or ≥ 2 failure-equivalents in multi-quarter courses. Academic probation is issued by the Dean when a student meets this criterion which represents notice that continued substandard academic performance may result in dismissal. When a student is placed on academic probation, it is noted in the student’s permanent academic file. 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. The student will seek assistance from Student Services and/or a COMCoach as needed. Students on academic probation are ineligible to hold student organizational offices, or to participate in international rotations.

Appeal Process
Following notification of a decision by the Promotions Committee, a student may appeal the decision in writing within three working 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.

Clerkship Attendance Policy
Third- and fourth-year students must attend all clerkship rotations. Departments may establish their own attendance requirements. Attendance and on-call requirements for clinical rotations take precedence over non-rotation events. Students must be sure that the requirements of each clinical rotation are understood and will be met prior to scheduling non-rotation events.

COMLEX-USA Exam Policy
Historical first-time pass rates 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 www.midwestern.edu/programs-and-admission/il-osteopathic-medicine.html

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 Eligibility
Students must successfully complete all OMS II course requirements, and meet requirements as established by the Dean’s office, prior to taking COMLEX-USA Level 1. For those students authorized to take Level 1, the initial attempt to pass the examination must occur within 30 days after the completion of OMS II course requirements. Students begin clinical rotations while awaiting results of their first examination attempt.

Students must pass the COMLEX-USA Level I examination, successfully complete all OMS III course requirements and meet requirements as established by the Dean’s office prior to taking Level 2-CE or Level 2-PE. For both the Level 2-CE and Level 2-PE examinations, the initial attempt at each examination, must be taken by the date approved by the Dean’s office.
The United States Medical Licensing Examination (USMLE) is not a substitute for any component of the COMLEX-USA examination.

COMLEX-USA Level 1 Failure
Any student who fails the COMLEX-USA Level 1 examination will be allowed to complete the clinical rotation in which he/she is participating at the time of failure notice. The student will be placed on a mandatory academic leave of absence for a length of time determined by the Dean or designee in order to study for the second attempt. 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 the failure notice. The student must meet with the Promotions Committee as soon as possible to determine the most appropriate course of action for the third attempt. The student will be placed on a mandatory academic leave of absence until such time as a passing grade is received. A student who fails the COMLEX-USA Level 1 examination a third time will be dismissed.

COMLEX-USA Level 2 CE or PE Failure
Any student who fails the COMLEX-USA Level 2 CE or PE examination must meet with the Chair of the Promotions Committee and the Dean or designee as soon as possible to determine the most appropriate course of action, up to and including a mandatory academic leave of absence or dismissal. Any student who fails either component of the COMLEX-USA Level 2 examination a second time must appear before the Promotions Committee to determine the course of action, up to and including a mandatory leave of absence or dismissal. Any student who fails the COMLEX-USA Level 2 CE or PE examination three times regardless of their performance on the COMLEX-USA Level 2 PE examination will be dismissed, and any student who fails the COMLEX-USA Level 2 PE examination three times regardless of their performance on the COMLEX-USA Level 2 CE examination will be dismissed.

Criminal Background Checks
CCOM follows the fingerprinting policies required by Illinois state law.

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

1. Failure to exhibit the personal and professional qualifications that are prerequisite to the practice of medicine
2. Violation of CCOM rules and regulations that are grounds for dismissal
3. Failure to achieve minimum academic standards
4. Falsification of admissions records
5. Failure to meet and maintain technical standards

Students who accumulate three or more failure equivalents in a single academic year, and Extended Study Program students who accumulate two failure equivalents, are recommended for dismissal. Students who receive four cumulative course failure equivalents in the preclinical years are recommended for dismissal. The Promotions Committee reserves the right to change its usual actions for reasons of additional consideration. All decisions of the Promotions Committee may be appealed to the Dean in accordance with policies found in this handbook.

Extended Study Program (ESP)

Academic. A student will be placed in the Extended Study Program for academic reasons at the discretion 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 retaken. If a student is placed on ESP, such action does not modify or limit the Promotion Committee’s options for recommendation for dismissal. Thus, the student may be dismissed for academic reasons while in ESP.

Students who accumulate three failure equivalents over more than a single academic year or two failure equivalents in a single quarter are placed immediately in the Extended Study Program or on academic leave of absence. The student is also on academic probation. He/she is required to retake failed courses during the regular academic year and are not eligible for summer courses either at CCOM or at any other medical school. The Promotions Committee individually reviews ESP students who fail academic courses. Students will be assessed pro-rata tuition for any additional years of instruction.

Voluntary. Students have the option of requesting to voluntarily enter the ESP program. The voluntary Extended Study Program allows students additional time to address personal issues by creating a program of study that allows 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 the end of the fifth week of a quarter. Requests received after the fifth week are reviewed by the Dean or designee and granted only for reasons of substantiated hardship or medical emergency.

Students on ESP will be assessed pro-rated tuition for any additional years of instruction.
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 Associate Dean of Academic Affairs to have a faculty mentor assigned through the COMCoaching program.

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 Associate Dean of Academic Affairs to request a faculty or student COMCoach. Students who are struggling academically may be required to work with a faculty COMCoach.

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 are in session must submit a written request for an excused absence at least 30 days prior to the event date. In the case of students on clinical rotations, the request must be made at least 30 days prior to the start of the rotation during which the event will occur. The student must be in good academic standing and receive written approval from either the Associate Dean of Academic Affairs or Associate Dean of Clinical Education to attend the event. Students are advised to receive this approval prior to making travel arrangements. Any costs incurred due to a student being denied approval to attend an off-campus event are the sole responsibility of the student.

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

Course Withdrawal
A student may withdraw from a course at any time. Withdrawals are not calculated into the GPA. If a student withdraws with a failing average, then a "WF" or "F" is assigned as a grade. A "WF" or "F" may be considered as a failure by the Promotions Committee.

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
The grade for a failed course repeated at an outside institution, or at MWU, and passed, is recorded as a grade of "C." The name of the institution where the course was retaken will be listed on the transcript.
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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent (%)</th>
<th>Quality Points (per credit)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93–100</td>
<td>4.000</td>
<td>—</td>
</tr>
<tr>
<td>A–</td>
<td>90–92</td>
<td>3.670</td>
<td>—</td>
</tr>
<tr>
<td>B+</td>
<td>87–89</td>
<td>3.330</td>
<td>—</td>
</tr>
<tr>
<td>B</td>
<td>83–86</td>
<td>3.000</td>
<td>—</td>
</tr>
<tr>
<td>B–</td>
<td>80–82</td>
<td>2.670</td>
<td>—</td>
</tr>
<tr>
<td>C+</td>
<td>77–79</td>
<td>2.330</td>
<td>—</td>
</tr>
<tr>
<td>C</td>
<td>70–76</td>
<td>2.000</td>
<td>—</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 70</td>
<td>0.000</td>
<td>—</td>
</tr>
<tr>
<td>I</td>
<td>—</td>
<td>0.000</td>
<td>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. To resolve an incomplete grade, an instructor must fill out and submit a Change of Grade form to the Registrar. All incomplete grades must be resolved within 10 working days starting from the first Monday following the end of the quarter unless there is written authorization by the Dean to extend the deadline. If an incomplete grade remains beyond the 10 days, it may be converted to a grade of “F,” which signifies failure of the course.</td>
</tr>
<tr>
<td>IP</td>
<td>—</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>P</td>
<td>—</td>
<td>0.000</td>
<td>A pass designation (P) 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.</td>
</tr>
<tr>
<td>W</td>
<td>—</td>
<td>0.000</td>
<td>Withdrawal/Passing is given when the student’s grade at the time of withdrawal is &lt;70% or &lt; C. Withdrawal/Passing is not counted in the GPA calculation, and is not counted in credit hour accrual for graduation.</td>
</tr>
<tr>
<td>WF</td>
<td>—</td>
<td>0.000</td>
<td>Withdrawal/Failing is given when the student’s grade at the time of withdrawal is &lt; 70% or &lt; 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.</td>
</tr>
<tr>
<td>AU</td>
<td>—</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>AP</td>
<td>—</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>PG</td>
<td>—</td>
<td>This designation indicates the grade is pending (Pending Grade) in a course or rotation.</td>
<td></td>
</tr>
</tbody>
</table>

These grading scales apply to all courses unless otherwise noted in the course syllabus.
Immunization Policy
Full-time 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/or affiliated hospital rotation requirements. Students who do not follow the immunization policy by the stated deadline may jeopardize their acceptance or continued enrollment in the College.

Liaison Structure
Student/Faculty 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 the Associate Deans, 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.

Supervision of Medical Students by Osteopathic or Allopathic Physicians Only
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

Any licensed physician, as defined above, who is designated as a teacher for CCOM students is recognized to be a member of the extended faculty.

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 intimidation 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.

Faculty List for Anatomy
Ellen Andrews, Ph.D.
Loyola University of Chicago
Assistant Professor

Teresa A. Dombrowski, Ph.D.
Loyola University
Professor

Michele Fornaro, Ph.D.
University of Turin, Italy
Assistant Professor

Rita K. Getz, Ph.D.
Indiana University School of Medicine
Associate Dean of Academic Affairs/Associate Professor

David Green, Ph.D.
George Washington University
Assistant Professor

Joanna Goral, Ph.D.
Loyola University of Chicago
Associate Professor

Sandra E. Inouye, Ph.D.
Northwestern University
Professor

Erin Leslie, Ph.D.
Northwestern University
Assistant Professor

Latha Malaiyandi, Ph.D.
University of Pittsburgh
Assistant Professor

George K. Niiero, Ph.D.
Loyola University
Chair and Associate Professor

Vivian E. Noble
Johns Hopkins University
Adjunct Instructor

Caley Orr, Ph.D.
Arizona State University
Assistant Professor

Michelle Singleton, Ph.D.
Washington University
Professor
Faculty List for Anesthesia
Christian C. Lyngby, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Professor Emeritus

Henry W. Witte, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Professor Emeritus

Faculty List for Biochemistry
Bryan C. Bjork, Ph.D.
University of Iowa
Assistant Professor

Nalini Chandar, Ph.D.
University of Madras, India
Professor

Jacalyn M. Green, Ph.D.
University of Michigan
Associate Professor

Sophie La Salle, Ph.D.
McGill University, Canada
Assistant Professor

Sean M. Lynch, Ph.D.
University of Ulster, Northern Ireland
Professor

Kenneth E. Nelson, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Lon J. Van Winkle, Ph.D.
Wayne State University School of Medicine
Professor

Susan M. Viselli, Ph.D.
Pennsylvania State University
Professor

Robin M. Zavod, Ph.D.
University of Kansas
Associate Professor

Faculty List for Emergency Medicine
Paul J. Allegretti, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Tapan Bhatt, D.O.
University of Osteopathic Medicine & Health Sciences
Clinical Assistant Professor

Jeff Bzdusek, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Chris Colbert, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Andrew Costello, M.D.
Emory University School of Medicine
Clinical Assistant Professor

Kevin J. Dardis, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

George S. Dengler, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

John W. Graneto, D.O., M.Ed., BS
Ohio University, College of Osteopathic Medicine
Chair, Department of Integrative Medicine
Associate Professor

Ed Hinton, D.O.
Midwestern University
Arizona College of Osteopathic Medicine
Clinical Instructor

Anwer M. Hussain, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Ralph F. Jackson, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Vernell Johnson, M.D.
University of Illinois
Clinical Instructor

Daniel R. Kowalzyk, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor, Chair

Patrick Malik, D.O.
University of Osteopathic Medicine and Health Sciences
Clinical Assistant Professor

Perry E. Marshall, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Aswini Nagaraj, M.D.
Bangalore Medical College
Clinical Assistant Professor

Azeem Pasha, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Issac G. Plamoottil, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Keri Robertson, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Jennifer Ron, M.D.
Rush University
Clinical Assistant Professor

Stephen A. Roskam, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Joseph Stock, M.D.
Rush Medical College
Clinical Assistant Professor

James H. Vasilakis, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Pierre E. Wakim, D.O.
Kansas City University of Medicine & Biosciences
College of Osteopathic Medicine
Clinical Assistant Professor

Kenneth M. Bretts, D.O.
University of Osteopathic Medicine and Health Sciences
Clinical Assistant Professor

Kathryn R. Burke, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

George S. Caleel, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

J. Wesley Cook, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Steven A. Corse, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Frances Daly, Ph.D.
Loyola University
Assistant Professor

Gerard M. Davidson, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Manish Desai, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Calvin H. Fischer, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Edward S. Forman, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

John W. Graneto, D.O., M.Ed.
Ohio University, College of Osteopathic Medicine
Chair, Department of Clinical Integration
Associate Professor

Maurice J. Halpin, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Michael K. Harney, D.O.
Midwestern University

FACULTY LIST FOR FAMILY MEDICINE

James M. Arons, D.O.
Kansas City University of Medicine & Biosciences
College of Osteopathic Medicine
Clinical Associate Professor

Kathleen M. Bewley-Thomas, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Chair, Department of Family Medicine/Clinical Assistant Professor
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Kurt P. Heinking, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Chair, Department of Osteopathic Manipulative Medicine
Associate Professor

Donald D. Higgins, Jr., D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

Dorothy K. Hines, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Anwer M. Hussain, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Kevin Hynes, Ph.D.
Purdue University
Research Assistant Professor

William Imlach, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Sandra E. Inouye, Ph.D.
Northwestern University
Professor

Carrie A. Jaworski, M.D.
Loyola University Stritch School of Medicine
Clinical Assistant Professor

Melanie R. Jessen, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Mark S. Juhn, D.O.
University of Medicine and Dentistry of New Jersey-School of Osteopathic Medicine
Clinical Assistant Professor

Kenneth J. Kavanaugh, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Mary E. Keen, M.D.
Northwestern University
Clinical Assistant Professor

Timothy A. Kisla, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Stephen G. Krates, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Marla D. Kushner, D.O.
Michigan State University, College of Osteopathic Medicine
Clinical Assistant Professor

Anthony S. Leazzo, D.O.
Philadelphia College of Osteopathic Medicine
Clinical Assistant Professor

Margaret H. Lechner, RN, MS
University of St. Francis
Director of Assessment/Assistant Professor

Eugen B. Loftin, III, M.D.
University of Illinois, College of Medicine
Clinical Assistant Professor

Terry W. Love, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Lismaida Maranto, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Christine M. Marcotte, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Gary A. Marcotte, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Susan E. Marcotte, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Trevor J. Marcotte, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Perry Marshall, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor
Ann McDermott, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Christopher J. McIntire, D.O.
West Virginia School of Osteopathic Medicine
Clinical Assistant Professor

Florian Miranzadeh, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Corinne Nawrocki, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Kenneth E. Nelson, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Glenn Nordehn, D.O.
Kirkville College of Osteopathic Medicine
Assistant Professor
Associate Dean of Clinical Education

Louis Papaeliou, D.O., MPH
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Frank J. Prerost, Ph.D.
DePaul University
Professor

Dean A. Raffaelli, DC, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Susan Rife, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

Frank Serrecchia, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

Michael D. Settecase, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

Greg E. Sharon, M.D.
Rush University
Clinical Assistant Professor

Daniel S. Sikic, D.O.
Midwestern University, Chicago College of Osteopathic Medicine
Clinical Assistant Professor

David N. Simcoe, D.O.
Lake Erie College of Osteopathic Medicine
Clinical Assistant Professor

Jitinder Rick Singh, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Anthony G. Tesmond, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Rodey Wassef, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

FACULTY LIST FOR INTERNAL MEDICINE

J. Daniel Andress, M.D.
University of Alabama School of Medicine
Clinical Associate Professor

Robert M. Aronson, M.D.
Northwestern University
Clinical Associate Professor

Shabnaz Azad, M.D.
University of Health Sciences, Antigua
Clinical Assistant Professor

David B. Braunstein, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

George T. Caleel, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Professor

Edwin J. Cook, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor
Mark E. Efrusy, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Riaz Elahi, M.D.
Dow Medical College & Civil Hospital
Clinical Associate Professor

Lawrence U. Haspel, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Hadi Hedayati, M.D.
Pahlavi University School of Medicine
Clinical Professor

Don L. Hollandsworth, D.O.
Kirkville College of Osteopathic Medicine
Clinical Associate Professor

Matthew L. Kamin, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

John L. Kniaz, D.O.
Philadelphia College of Osteopathic Medicine
Clinical Associate Professor

Stephanie Marshall, D.O.
Clinical Associate Professor

Michael A. Nicholas, D.O.
West Virginia School of Osteopathic Medicine
Clinical Assistant Professor

Karen J. Nichols, D.O., M.A., MACOI, CS
Kansas City University of Medicine & Biosciences
College of Osteopathic Medicine
Professor and Dean

Glenn Nordehn, D.O.
Kirkville College of Osteopathic Medicine
Associate Professor
Associate Dean of Clinical Education

Michael R. Olden, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

Ratnakar S. Rajanahally, M.D.
Mysore University, J. J. M. Medical College
Clinical Assistant Professor

Kenneth J. Ramsey, D.O.
Midwestern University

Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Keith A. Reich, D.O.
Kirkville College of Osteopathic Medicine
Clinical Assistant Professor

Laura M. Rosch, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Chair of Internal Medicine and Clinical Assistant Professor

C. Richard Smith, Jr., D.O.
Philadelphia College of Osteopathic Medicine
Clinical Professor

Brad L. Suprenant, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Glenn I. Weiner, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Ramaraja Yalavarthi, M.D.
Guntur Medical College
Clinical Assistant Professor

FACULTY LIST FOR MEDICAL EDUCATION
Pui W. Wong, MALIS
Rosary College, River Forest, IL
Medical Librarian

FACULTY LIST FOR MICROBIOLOGY AND IMMUNOLOGY
Aaron D. Alexander, Ph.D.
George Washington University
Professor Emeritus

John R. Burdick, Ph.D.
Iowa State University
Professor and Dean of Basic Sciences

Richard A. Laddaga, Ph.D.
McGill University, Montreal
Professor

Balbina J. Plotkin, Ph.D.
University of Tennessee
Professor

Kyle H. Ramsey, Ph.D.
University of Arkansas for Medical Sciences
Professor of Microbiology and Immunology
Associate Dean of Basic Sciences
FACULTY LIST FOR OBSTETRICS AND GYNECOLOGY

Thomas P. Boesen, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Robert M. Bonaminio, D.O.
Kirksville College of Osteopathic Medicine
Clinical Assistant Professor

Jason Cullen, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Travis K. Haldeman, D.O.
Des Moines University
College of Osteopathic Medicine
Clinical Assistant Professor

Shayna Hollingsworth-Mancuso, D.O.
Clinical Instructor

Teresa A. Hubka, D.O.
Des Moines University
College of Osteopathic Medicine
Chair, Department of OB/GYN

Mark Kalchbrenner, D.O., FACOOG
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Howard Kaufman, D.O., FACOOG
New York College of Osteopathic Medicine
Clinical Associate Professor

Thomas Losure, D.O. FACOOG
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Angelique Mizera, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Earl Pescatore, D.O.
Nova Southeastern
College of Osteopathic Medicine
Clinical Assistant Professor

Paul Rosenberg, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

R. Scott Springer, D.O.
Des Moines University
College of Osteopathic Medicine
Clinical Associate Professor

FACULTY LIST FOR OSTEOPATHIC MANIPULATIVE MEDICINE

C. Matthew Chelich, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Andrea Clem, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Richard A. Feely, D.O.
Kirksville College of Osteopathic Medicine
Clinical Associate Professor

Ann L. Habenicht, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Bill Hampton, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor

Kurt P. Heinking, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Associate Professor

Kim Huntington-Alfano, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Instructor
Jerry Jensen, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Robert E. Kappler, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Professor Emeritus

Mary L. Kelly, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Bernadette G. Kohn, D.O.  
University of North Texas  
Texas College of Osteopathic Medicine  
Clinical Assistant Professor

Robert H. Manoogian, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Instructor

James E. Marotz, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Mark E. McKeigue, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Professor

Anette K. S. Mnbhi, RN, MSN, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Charles Mok, Jr., D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Kenneth E. Nelson, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Professor

Dean A. Raffaelli, DC, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Laura Rosch, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Instructor

Ted Schock, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Nicette Sergueef, D.O.  
Ecole de Kinesitherapie  
Clinical Assistant Professor

Frank R. Serrecchia, D.O., RDH  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

Aimee D. Stotz, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Clinical Assistant Professor

FACULTY LIST FOR OTOLARYNGOLOGY  
Graham O. Davies, DDS, MSD  
Northwestern University  
Professor Emeritus

FACULTY LIST FOR PATHOLOGY  
Marylee A. Braniecki, M.D.  
Kansas University School of Medicine  
Clinical Assistant Professor

Philip F. Dupont, M.D., Ph.D.  
Universidad Autonoma de Cuidad Juarez  
Clinical Assistant Professor

Louis W. Gierke, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Professor Emeritus

John N. Kasimos, D.O.  
Midwestern University  
Chicago College of Osteopathic Medicine  
Professor and Chair

Randall K. McGivney, D.O.  
Oklahoma State University  
College of Osteopathic Medicine & Surgery  
Clinical Assistant Professor

FACULTY LIST FOR PEDIATRICS  
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
Clinical Assistant Professor

Gene Denning, D.O.
Midwestern University: Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Michael DeStefano, M.D.
Rush University
Clinical Assistant Professor

John Graneto, D.O., M.Ed., FACOEP-D, FACOP
Ohio University
Associate Professor

Timothy Hilt, D.O.
Midwestern University: Chicago College of Osteopathic Medicine
Clinical Affiliate Professor

Dalia K. Irons, D.O.
Des Moines University College of Osteopathic Medicine
Clinical Assistant Professor

Saba Khalid, M.D.
Nawabshah Medical School for Girls
Clinical Assistant Professor

Jayesh Kothari, M.D.
University of Bombay, India: Medical School at Seth G.S. Medical College
Clinical Affiliate Professor

Catherine A. Macyko, M.D.
Uniformed Services University of Health Sciences
Clinical Assistant Professor

Paul A. Panzica, M.D.
Southern Illinois University School of Medicine
Clinical Assistant Professor

Shobhana Ravikumar, M.D.
Madras Medical College
Clinical Affiliate Professor

FACULTY LIST FOR PHARMACOLOGY
Kirk Dineley, Ph.D.
University of Pittsburgh
Associate Professor

Joshua R. Edwards, Ph.D.
Michigan State University
Associate Professor

Michael J. Fay, Ph.D.
University of Mississippi
Professor

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

Peer Jacobson, Ph.D.
University of California at Santa Barbara
Adjunct Professor

Phillip Kopf, Ph.D.
University of New Mexico
Assistant Professor

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

M. Beatriz Mayer, M.A.
Northern Illinois University
Adjunct Instructor

Jacob D. Peuler, Ph.D.
Pennsylvania State University
Professor

Walter C. Prozialeck, Ph.D.
Thomas Jefferson University
Professor and Chair

FACULTY LIST FOR PHYSIOLOGY
Mae J. Ciancio, Ph.D.
Loyola University Chicago
Assistant Professor, Program in Biomedical Sciences

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

Dorothy K. Hines, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Kathy J. LePard, Ph.D.
Ohio State University
Associate Professor

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

Paul F. McCulloch, Ph.D.
University of Saskatchewan
Associate Professor

Kathleen P. O'Hagan, Ph.D.
Rutgers, The State University of NJ
Professor and Chair
Dennis J. Paulson, Ph.D.
Texas Tech University School of Medicine
Professor
Vice President and Chief Academic Officer for Medical and Dental Education

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

Fred D. Romano, Ph.D.
Loyola University of Chicago
Dean, Downers Grove Campus, College of Health Sciences and Professor

Jacquelyn M. Smith, Ph.D.
University of Michigan
Dean, Glendale Campus, College of Health Sciences and Professor

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

FACULTY LIST FOR BEHAVIORAL MEDICINE/PSYCHIATRY

Behavioral Medicine
Karen Farrell, Psy.D.
Argosy University
Illinois School of Professional Psychology
Director of Training and Professor

Michelle Lee, Ph.D.
Case Western University
Graduate School
Professor

Richard Ney, Ph.D.
Loyola University of Chicago
Graduate School
Professor

Frank Prerost, Ph.D.
DePaul University
Graduate School
Professor

Ann Sauer, Ph.D.
Loyola University of Chicago
Graduate School
Assistant Professor

Diana Semmelhack, Psy.D.
Argosy University
Illinois School of Professional Psychology
Associate Professor

Psychiatry

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

Joseph Chuprevich, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Neal Florence, M.D.
Loyola University Medical Center
Clinical Instructor

Ahmed Hussain, M.D.
Osmania University
Clinical Instructor

Charles Kaegi, M.D.
University of Illinois, College of Medicine at Chicago
Clinical Instructor

Aida Mihajlovic, M.D.
University of Sarajevo
Clinical Instructor

Mario Robbins, D.O.
Michigan State University College of Osteopathic Medicine
Clinical Instructor

Alex Spadoni, M.D.
Loyola University Stritch School of Medicine
Clinical Professor

Shahnour Yaylayan, M.D.
American University of Beirut, Medical Center
Clinical Assistant Professor

FACULTY LIST FOR SURGERY

Basel I. Al-Aswad, M.D.
University of Baghdad
Clinical Associate Professor

Emmanuel S. Bansa, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

William J. Baylis, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Clay A. Canaday, D.O.
Kansas City University of Medicine & Biosciences
College of Osteopathic Medicine
Clinical Assistant Professor

James R. Davis, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Judy L. Davis, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

James C. Doherty, M.D., FACS
Northwestern University Medical School
Clinical Assistant Professor

Scott O. Donnelly, D.O., FACOS
Michigan State University
College of Osteopathic Medicine
Clinical Assistant Professor

I. Harun Durudogan, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Associate Professor

William J. Ennis, D.O., MBA
New York College of Osteopathic Medicine
Clinical Professor

Brian P. Farrell, M.D.
Loyola University of Chicago, Stritch School of Medicine
Clinical Assistant Professor

Robert E. Gorsich, M.D.
University of Illinois, College of Medicine
Clinical Assistant Professor

Anthony M. Grimaldi, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Michael J. Iwanicki, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Keith A. Kattner, D.O.
Kirkville College of Osteopathic Medicine
Clinical Assistant Professor

Donald W. Kucharzyk, D.O.
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

P. Robert Lombardo, D.O., FACOS
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Wendy J. Marshall, M.D.
University of Vermont, School of Medicine
Clinical Assistant Professor

Albert F. Milford III, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Richard F. Multack, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Professor

Vijay S. Nair, M.D.
Trivandrum Medical College (Kerala University)
Clinical Associate Professor

William K. Payne, III, M.D., MPH
University of California at Los Angeles, School of Medicine
Clinical Professor

Keith R. Pitchford, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor

Paul S. Ray, D.O.
Des Moines University
College of Osteopathic Medicine
Clinical Professor

Paul M. Stec, D.D.S.
Marquette University Dental School
Clinical Assistant Professor

Aswath Subram, M.D.
Bangalore Medical College
Clinical Assistant Professor

Thomas E. Turcotte, D.O.
Michigan State University College of Osteopathic Medicine
Clinical Associate Professor

Christine A. Walko, O.D.
Illinois College of Optometry
Clinical Instructor

Tian Xia, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Clinical Assistant Professor
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 Doctor of Pharmacy (Pharm.D.) degree program is accredited by the Accreditation Council for Pharmacy Education (ACPE): 135 S. LaSalle Street, Suite 4100, Chicago, Illinois 60603-4810; 312/664-3575; fax 312/664-4652; or www.acpe-accredit.org.

DEGREE DESCRIPTION
The College’s Pharm.D. Program provides students with enhanced experiences in the biomedical, pharmaceutical, and clinical sciences. The program requires six years of coursework, the first two years at another college and the last four years full-time at CCP. 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. Patient Care Domain
   - Practice patient-centered care
   - Practice evidence-based clinical decision making
   - Promote public health and disease prevention

2. Practice Management Domain
   - Develop and manage a pharmacy practice
   - Evaluate outcomes data associated with the practice of pharmacy

3. Professionalism Domain
   - Participate effectively in interdisciplinary healthcare teams
   - Communicate effectively
   - Demonstrate critical thinking and problem solving skills
   - Act in a professionally responsible manner and promote such action in others
   - Demonstrate self-assessment and self-directed learning

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 highly selective; approximately 1,500 applications were received in 2013. Completed applications received on or before the application deadline are reviewed to determine applicant eligibility for on-campus Mandatory Candidate Visits. Within its competitive admissions framework, CCP uses multiple criteria to select the most qualified candidates. Cumulative grade point average (GPA), science GPA, Pharmacy College Admission Test (PCAT) scores, letters of recommendation, written 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

- Minimum cumulative GPAs and science GPAs of 2.50 on a 4.00 scale
- Grades of "C" or better for prerequisite courses (grades of C- are not acceptable)

2. Direct submission of scores from the Pharmacy College Admissions Test (PCAT) 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
   - Only scores earned from the test offered in 2010 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 minimum cumulative GPA for admission consideration, higher cumulative GPAs are more competitive and recommended.
   - The average cumulative GPA of applicants admitted for Fall 2013 was 3.21 on a 4.00 scale

2. View component and composite PCAT scores below the 50th percentile with particular concern, although there are no minimum PCAT scores
   - The average composite PCAT score of applicants admitted for Fall 2013 was in the 59th percentile

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology with lab</td>
<td>8</td>
</tr>
<tr>
<td>Human or Vertebrate Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>General Chemistry with lab</td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry with lab</td>
<td>8</td>
</tr>
<tr>
<td>Physics (mechanics, heat, force and motion must be included in the course)</td>
<td>3</td>
</tr>
<tr>
<td>Calculus (integral &amp; differential)</td>
<td>3</td>
</tr>
<tr>
<td>English Composition</td>
<td>6</td>
</tr>
<tr>
<td>Speech/Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
</tr>
<tr>
<td>Statistics (general statistics or biostatistics)</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Science Electives (Includes courses within the areas of psychology, sociology and anthropology)</td>
<td>6</td>
</tr>
<tr>
<td>General Education Electives (Any course not related to science, math, physical education, or health care. Recommended courses include arts and humanities, social and behavioral sciences, foreign language, and business and computer courses.)</td>
<td>8</td>
</tr>
</tbody>
</table>

Total 62 Semester/90 Quarter hours
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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

Application Process and Deadlines
Applicants must submit a completed Pharmacy College Application Service (PharmCAS) application.

1. PharmCAS Application:
Applicants are required to submit online applications and application fees to PharmCAS by January 5, 2015. In addition to the online application and application fees, applicants must forward to PharmCAS official transcripts from all colleges and universities attended by the January 5th 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. 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. Due to the large number of applications and the limited number of seats available, students are strongly encouraged to complete their PharmCAS application and their CCP supplemental 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 (PCAT):
Applicants must arrange for scores from the Pharmacy College Admissions Test (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 2010 or more recently will be accepted. This exam is offered by Harcourt Assessment, Inc., (also known as Pearson), 800-622-3231; www.pcatweb.info. The exam is typically offered four times per year. However, please note to meet the application deadline dates, 1st time PCAT test takers should take the exam prior to January 2015. Please check with Harcourt Assessment, Inc. for the exam dates.

3. Letters of Recommendation:
Applicants must submit two letters of recommendation from professionals to PharmCAS (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 advisory committee. It is preferred that the second letter be written by a pharmacist. However, any one of the following recommenders is also acceptable: prehealth advisory committee, 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, PCAT scores (as reported to PharmCAS), two letters of recommendation (as submitted to PharmCAS), must be received in the Office of Admissions on or before March 1, 2015. 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 on-campus Mandatory Candidate Visits, 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 applicants merit invitations to attend Mandatory Candidate Visits. 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 Mandatory Candidate Visits to achieve further consideration in the admissions process.

Candidates will be required to participate in group interviews with other pharmacy applicants during their Mandatory Candidate Visits. Group 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 and to tour the Midwestern University campus.

Following applicant visits, their files are forwarded to the Admissions Committee for review. The committee may recommend to accept, to deny, or to 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 within two to four weeks of their visits.

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.

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, 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
Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean, will identify and discuss what accommodations, if any, the College would need to make that would allow the candidate to complete the curriculum. 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 in their professional program.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

Dual Acceptance Programs
Loyola University Chicago College of Arts and Sciences, Benedictine University (Lisle, IL), Benedictine University at Springfield, Dominican University, Illinois Institute of Technology, Millikin University, Lewis University, the University of Saint Francis (Fort Wayne, IN), University of Wisconsin-Milwaukee, Elmhurst College, Hebrew Theological College and Rockford College each offer a Dual Acceptance Program with CCP for selected students who successfully complete the specified coursework. These students will be granted early acceptances to CCP. To receive consideration for the Dual Acceptance Program, students must meet the following eligibility requirements:

1. Apply to the CCP Dual Acceptance Program as a high school senior.
2. Earn admission to an affiliated college or university that offers a Dual Acceptance Program.
3. Apply for admission to the Dual Acceptance Program by February 15 of the year of matriculation at the affiliated college or university.
4. Score in the top 20% on a college entrance exam (ACT 25 or higher; SAT 1700 or higher). Applicants must submit a national test score for ACT or SAT that includes a writing component score.
5. Earn a minimum cumulative GPA of 3.20 on a 4.00 scale.
6. Demonstrate a people or service orientation through community service or extracurricular activities.
7. Demonstrate motivation for and commitment to the pharmacy profession as demonstrated by previous work, volunteer, or other life experiences.
8. Possess the oral and written communication skills necessary to interact with patients and colleagues.

Eligible students should obtain their applications from the affiliated college or university that offers the Dual Acceptance...
Program. The deadline for submitting completed applications is **February 15**.

After the Midwestern University Office of Admissions receives all completed application materials from the affiliate colleges or universities, applicant files are reviewed to determine which applicants merit invitations to attend Mandatory Candidate Visits. Invited applicants must attend Mandatory Candidate Visits for further consideration in the admissions process.

Candidates will be required to participate in group interviews with other dual acceptance applicants. Group 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, and to tour the Midwestern University campus.

Following mandatory candidate visits, their files are forwarded to the 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 CCP upon successful completion of the program requirements:

1. All prerequisite prepharmacy courses must be completed at the affiliated college or university that offers a Dual Acceptance Program within a two-year period.
2. A minimum cumulative GPA of 3.20 must be achieved at the end of the spring semester/quarter of the first and second prepharmacy years and at the end of all prepharmacy coursework at the affiliated college or university.
3. Students must earn a minimum grade of "C" in all required courses. A grade of "C-" or lower is not acceptable.
4. Students may not repeat any prerequisite course for a higher grade.
5. Students must submit all required deposit fees according to the schedule in their letters of understanding, which are provided to students at the time of acceptance to the Dual Acceptance Program.
6. Students must comply with the requirements outlined in the matriculation agreement and Technical Standards certification form, which are provided to students in the spring of their second prepharmacy year.

The PCAT and PharmCAS applications are waived for students who successfully complete the Dual Acceptance Program.

Students who are not accepted to or fail to complete the program may reapply to CCP using the standard procedures.

**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.

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 March 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 a Mandatory Candidate Visit. As part of their visits, candidates will be required to participate in group interviews with other pharmacy applicants. Group 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 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 to CCP if they:

1. Complete at least two semesters or three quarters of full-time study (i.e., at least 15 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 2.5 or better for the two semesters or three quarters of full-time study at the advanced prepharmacy level or higher.
3. Earn at least "C" (not C-) in all courses taken.

Students fulfilling these requirements will be permitted to reapply to the University and to the College. Students should obtain their 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 PHARM.D. PROGRAM
To qualify for graduation, a student must have satisfied the following requirements:

1. Successfully completed a minimum of 90 quarter 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 2.00 for all requisite professional and experiential coursework at the College.
4. Achieved a cumulative Advanced Pharmacy Practice Experience grade point average of 2.00 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 a Doctor of Pharmacy program accredited by the Accreditation Council for Pharmacy Education. 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.

**PHARM.D. CURRICULUM**

*The College reserves the right to alter the curriculum as it deems appropriate.*

All students must enroll in at least 12 quarter hours per quarter and are charged full-time tuition.

### First Professional Year:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Total Quarter Credit Hours Required:</th>
<th>51.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOC 1551</td>
<td>Biochemistry I</td>
<td>3.5</td>
</tr>
<tr>
<td>CORE 1599</td>
<td>Interprofessional Education I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1520</td>
<td>Human Physiology I</td>
<td>4.5</td>
</tr>
<tr>
<td>PPRA 1501</td>
<td>Introduction to Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PPRA 1511</td>
<td>Healthcare Systems</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 1501</td>
<td>Reflective Portfolio I</td>
<td>1</td>
</tr>
<tr>
<td>PSCI 1511</td>
<td>Pharmaceutical Calculations</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td><strong>Winter Quarter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOC 1552</td>
<td>Biochemistry II</td>
<td>4.5</td>
</tr>
<tr>
<td>FMED 1500</td>
<td>Healthcare Communications I</td>
<td>1</td>
</tr>
<tr>
<td>MICR 1576</td>
<td>Introductory Immunology/Biologics</td>
<td>2</td>
</tr>
<tr>
<td>PHYS 1521</td>
<td>Human Physiology II</td>
<td>4.5</td>
</tr>
<tr>
<td>PPRA 1522</td>
<td>Introduction to Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 1512</td>
<td>Pharmaceutics I: Physical Pharmacy and Dosage Form Design</td>
<td>2</td>
</tr>
<tr>
<td>PSCI 1513</td>
<td>Dosage Form Laboratory</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>Spring Quarter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICR 1510</td>
<td>Infectious Diseases and Their Etiologic Agents</td>
<td>4</td>
</tr>
<tr>
<td>PPRA 1513</td>
<td>Principles of Evidence-Based Pharmacy Practice</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Total Quarter Credit Hours Required:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1523</td>
<td>Introductory Pharmacy Practice Experience Longitudinal I</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 1514</td>
<td>Pharmaceutics II: Drug Delivery and Dosage Form Design</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 1515</td>
<td>Introduction to Biopharmaceutics and Pharmacokinetics</td>
<td>3.5</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>14.5-17.5</td>
</tr>
</tbody>
</table>

### Second Professional Year:

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Total Quarter Credit Hours Required:</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHAR 1641</td>
<td>Pharmacology I</td>
<td>4</td>
</tr>
<tr>
<td>PPRA 1601</td>
<td>Reflective Portfolio II</td>
<td>0.5</td>
</tr>
<tr>
<td>PPRA 1611</td>
<td>Pharmacotherapeutics I</td>
<td>5</td>
</tr>
<tr>
<td>PPRA 1621</td>
<td>Introductory Pharmacy Practice Experience Longitudinal II</td>
<td>0.5</td>
</tr>
<tr>
<td>PPRA 1631</td>
<td>Institutional Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 1601</td>
<td>Introduction to Drug Structure Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>15-18</td>
</tr>
<tr>
<td><strong>Winter Quarter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHAR 1642</td>
<td>Pharmacology II</td>
<td>4</td>
</tr>
<tr>
<td>PPRA 1612</td>
<td>Pharmacotherapeutics II</td>
<td>5</td>
</tr>
<tr>
<td>PPRA 1622</td>
<td>Introductory Pharmacy Practice Experience II-Health Systems (1/2 class)</td>
<td>2</td>
</tr>
<tr>
<td>PPRA 1623</td>
<td>Introductory Pharmacy Practice Experience Longitudinal III</td>
<td>0.5</td>
</tr>
<tr>
<td>PSCI 1602</td>
<td>Chemical Principles of Drug Action I</td>
<td>4.5</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>14-20</td>
</tr>
<tr>
<td><strong>Spring Quarter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHAR 1643</td>
<td>Pharmacology III</td>
<td>2</td>
</tr>
<tr>
<td>PPRA 1613</td>
<td>Pharmacotherapeutics III</td>
<td>5.5</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
<td>Credits</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>PPRA 1622</td>
<td>Introductory Pharmacy Practice Experience II-Health Systems (1/2 class)</td>
<td>2</td>
</tr>
<tr>
<td>PPRA 1624</td>
<td>Introductory Pharmacy Practice Experience Longitudinal IV</td>
<td>1.5</td>
</tr>
<tr>
<td>PSCI 1603</td>
<td>Chemical Principles of Drug Action II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>0-3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13-18</strong></td>
</tr>
</tbody>
</table>

**Third Professional Year:**

Total Quarter Credit Hours Required: **42.5**

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1701</td>
<td>Reflective Portfolio III</td>
<td>0.5</td>
</tr>
<tr>
<td>PPRA 1711</td>
<td>Pharmacotherapeutics IV</td>
<td>5</td>
</tr>
<tr>
<td>PPRA 1721</td>
<td>Introductory Pharmacy Practice Experience III: Clinical (1/3 class)</td>
<td>3</td>
</tr>
<tr>
<td>PPRA 1731</td>
<td>Healthcare Communications II</td>
<td>2</td>
</tr>
<tr>
<td>PPRA 1751</td>
<td>Pharmacy Management</td>
<td>4</td>
</tr>
<tr>
<td>PSCI 1751</td>
<td>Chemical Principles of Drug Action III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13.5-20.5</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1712</td>
<td>Pharmacotherapeutics V</td>
<td>5</td>
</tr>
<tr>
<td>PPRA 1721</td>
<td>Introductory Pharmacy Practice Experience III: Clinical (1/3 class)</td>
<td>3</td>
</tr>
<tr>
<td>PPRA 1742</td>
<td>Clinical Skills in Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PPRA 1752</td>
<td>Pharmacy Law/Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 1722</td>
<td>Pharmaceutical Biotechnology</td>
<td>2</td>
</tr>
<tr>
<td>PSCI 1752</td>
<td>Chemical Principles of Drug Action IV</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>14-21</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1713</td>
<td>Pharmacotherapeutics VI</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1721</td>
<td>Introductory Pharmacy Practice Experience III: Clinical (1/3 class)</td>
<td>3</td>
</tr>
<tr>
<td>PPRA 1763</td>
<td>Quality Assurance and Effective Pharmacy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PPRA 1783</td>
<td>Clinical Pharmacokinetics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>1-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12-18</strong></td>
</tr>
</tbody>
</table>

**Fourth Professional Year:**

Students will be registered for six rotation blocks out of the eight rotation blocks available.

Total Quarter Credit Hours Required **54.5**

**Fourth Professional Year Summer-Spring Quarters**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1801</td>
<td>Reflective Portfolio IV</td>
<td>0.5</td>
</tr>
<tr>
<td>PPRA 1885</td>
<td>Elective Advanced Pharmacy Practice Experience</td>
<td>9</td>
</tr>
<tr>
<td>PPRA 1886</td>
<td>Community Advanced Pharmacy Practice Experience</td>
<td>9</td>
</tr>
<tr>
<td>PPRA 1887</td>
<td>Hospital Advanced Pharmacy Practice Experience</td>
<td>9</td>
</tr>
<tr>
<td>PPRA 1888</td>
<td>General Medicine Advanced Pharmacy Practice Experience</td>
<td>9</td>
</tr>
<tr>
<td>PPRA 1889</td>
<td>Ambulatory Care Advanced Pharmacy Practice Experience</td>
<td>9</td>
</tr>
<tr>
<td>PPRA 1890</td>
<td>Clinical Specialty Advanced Pharmacy Practice Experience</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>54.5</strong></td>
</tr>
</tbody>
</table>
### Professional Electives

During their four years of study at CCP, students complete a minimum total of 16 hours of elective credit. Their elective options may include the following:

<table>
<thead>
<tr>
<th>Biochemistry</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 1445</td>
<td>Principles and Practices of Enteral and Parenteral Nutrition</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOC 1447</td>
<td>Nutrition in Preventive Medicine</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Microbiology</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 1304</td>
<td>Agents of Biological and Chemical Warfare and Terrorism</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pharmacology</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 1410</td>
<td>Pharmacologic Aspects of Drug Abuse</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PHAR 1420</td>
<td>Medical Spanish</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PHAR 1430</td>
<td>Cardiovascular Pharmacology</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pharmacy Practice</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PPRA 1301</td>
<td>Special Project or Research</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td>PPRA 1302</td>
<td>Community Service</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1303</td>
<td>Advanced Internal Medicine</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1304</td>
<td>Advanced Internal Medicine Practicum</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1305</td>
<td>Pharmacy: Its History and Heroes</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1308</td>
<td>Introduction to Teaching and Learning Issues</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1309</td>
<td>Pediatric Pharmacotherapy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1310</td>
<td>Landmark Trials in Primary Care</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1312</td>
<td>Psychiatric Pharmacy: Beyond the Basics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1313</td>
<td>Geriatric Patient Care</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1314</td>
<td>Practical Applications of Women’s Health Issues</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1315</td>
<td>Advanced Clinical Diabetes Management</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1316</td>
<td>Advanced Infectious Disease</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1317</td>
<td>End-of-Life Care</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1318</td>
<td>Introduction to American Sign Language for Health Professionals</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1319</td>
<td>Introduction to Nuclear Pharmacy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1320</td>
<td>Oncology Therapeutics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1321</td>
<td>Medication Management in Primary and Secondary Schools</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1322</td>
<td>Tobacco Cessation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1324</td>
<td>Spirituality and Health</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1325</td>
<td>Topics in Career Management</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1326</td>
<td>Advanced Over the Counter Medications</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1327</td>
<td>Therapeutic Issues in Critical Care</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1328</td>
<td>Home Infusion Therapy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1329</td>
<td>Advanced Physical Assessment</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1330</td>
<td>Practical Applications of Men’s Health Issues</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1331</td>
<td>Lifestyle Modifications in Pharmacotherapy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1333</td>
<td>Global Pharmaceutical Sciences</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1334</td>
<td>Disease and Practice Management in Ambulatory Care</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1335</td>
<td>Introduction to Managed Care Pharmacy</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1336</td>
<td>Topics in Leadership and Management</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PPRA 1337</td>
<td>Topics in Community Pharmacy Finance and Marketing</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1338</td>
<td>Epidemologic Investigation of Medication Use</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1339</td>
<td>Anticoagulation in Clinical Practice</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PPRA 1340</td>
<td>Advanced Topics in HIV</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
All students must successfully complete twelve credit hours of introductory pharmacy practice experiences (IPPEs) during the first, second, and third professional years. These must be completed in community, hospital, and clinical settings.

In addition, students must complete six full-time advanced pharmacy practice experiences (APPEs) during their fourth professional year including 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.

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.

**Distant Advanced Pharmacy Practice Experiences**

Distant Advanced Pharmacy Practice Experiences (APPEs) are defined as 6 week PS-IV 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).

Students may apply to be considered for placement on distant APPEs during their PS-II year. 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 the standard University affiliation agreement must be completed prior to the student beginning the rotation. There is no guarantee that requested distant APPEs will be approved and scheduled. Schedule changes resulting from preceptor changes 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: pharmaceutics, medicinal chemistry, and natural products/pharmacognosy.

Pharmaceutics 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 Introductory Pharmacy Practice Experiences and Advanced Pharmacy Practice Experiences in quality, contemporary practice settings that provide positive, supportive, and challenging environments. The pharmacy practice experiences will allow enhancement of the students' professional socialization, knowledge, and skills and to prepare them to be caring and competent pharmacists, able to contribute to the profession and to deliver optimal patient-centered care now and in the future.

Postgraduate Education

The College offers a number of postgraduate training opportunities: Postgraduate Year One (PGY-1) pharmacy residency program; Postgraduate Year Two (PGY-2) critical care pharmacy residency program; PGY-2 infectious diseases pharmacy residency program; and an infectious disease pharmacotherapy fellowship. In addition, the college is affiliated with two PGY-1 community pharmacy residency programs. All College residency programs are fully accredited by the American Society of Health-System Pharmacists.

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.

BIOC 1551 Biochemistry I
This course combines lectures and small group discussions of clinical case studies in workshops. Lectures address structure-function relationships in major biomolecules, human metabolism, and cell biology. Workshops feature clinical case studies to illustrate principles of clinical biochemistry and application to the practice of pharmacy. Workshop topics may include anemias, cytochrome p450 enzymes, dangers of dietary supplements, diabetes mellitus, drug biomembrane transport, environmental toxins and hemostasis disorders. 3.5 credits
Prerequisites: PS-1 standing
BIOC 1552 Biochemistry II
This course combines lectures and small group discussions of clinical case studies in workshops. Lectures address human metabolic profiles of major tissues and organs, principles of gene expression, chromosomal abnormalities, multifactorial inheritance, and nutrition. Workshops feature clinical case studies to illustrate principles of clinical biochemistry and application to the principles of biochemistry and to the practice of pharmacy. Workshop topics may include antimetabolite therapy, kidney disease, hormone replacement therapy, hepatotoxicity and metabolic effects of drugs, genome/environmental toxins, hyperlipidemias, and drug-induced jaundice.
4.5 credits
Prerequisites: BIOC 1551 Biochemistry I

CORE 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

FMED 1500 Healthcare Communications I
This course will introduce first year 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
Prerequisites: PS-I Standing

MICR 1510 Infectious Diseases and Their Etiologic Agents
This course is designed as an integrated didactic and self-study program with a laboratory component. A basic knowledge of clinical microbiology is provided so that students can understand the interaction between the host and pathogenic microorganisms. Emphases include the rational management, prevention, and control of infectious diseases.
4 credits
Prerequisites: MICR 1576 Introductory Immunology/Biologics

MICR 1576 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
Prerequisites: BIOC 1551 Biochemistry I

PHAR 1641, 1642, 1643 Pharmacology I, II, III
Pharmacology studies the properties and effects of drugs and, in a more general sense, the interactions between chemical compounds and living systems. This series includes the general principles of pharmacology; the dynamics of absorption, distribution, metabolism, and elimination of drugs; drug testing in humans; and the role of official regulatory agencies. The student studies drugs affecting the autonomic nervous system; drugs acting on the central nervous system; cardiovascular drugs; chemotherapy of microbial, parasitic, and neoplastic diseases; drugs acting on blood and blood forming organs; and hormone and hormone antagonists. Topics such as principles of toxicology, vitamins, gastric antacids, digestants, laxatives, antihistamines, antiserotonin agents, and drugs causing birth defects are included.
Prerequisites:
- Prerequisites for PHAR 1641 Pharmacology I, 4 credits: PS-II standing
- Prerequisites for PHAR 1642 Pharmacology II, 4 credits: PHAR 1641 Pharmacology I
- Prerequisites for PHAR 1643 Pharmacology III, 2 credits: PHAR 1642 Pharmacology II

PHYS 1520 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, respiratory, 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.
4.5 credits
Prerequisites: PS-I standing

PHYS 1521 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 renal, 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.
4.5 credits
Prerequisites: PS-I standing
**PPRA 1501 Introduction to Pharmacy Practice**
This course introduces the student to the philosophy, socialization, and practice of the profession of pharmacy through lectures. Students will learn the history and evolution of pharmacy as a profession, various career opportunities, and relevant issues within the profession today.
3 credits
Prerequisites: PS-I standing

**PPRA 1511 Healthcare Systems**
This course describes elements and forces affecting the organization, delivery, and financing of health care services in general and pharmacy services in particular. The course explores major economic/political/social aspects of the health care delivery system and examines how provider relationships often affect patient outcomes. Strengths and weaknesses of the system, including possible options for mitigating the latter, are identified. The course describes changing roles of pharmacy practice and methods of financing and shows how professional services may influence and be influenced by these factors.
3 credits
Prerequisites: PS-I standing

**PPRA 1513 Principles of Evidence-Based Pharmacy Practice**
This course introduces students to the knowledge and skills necessary to construct sound pharmacotherapeutic recommendations through retrieval and evaluation of clinical evidence. Students learn efficient approaches to respond to drug information inquiries; and develop primary literature evaluation and critical thinking skills necessary to formulate prudent drug information responses and patient care recommendations.
4 credits
Prerequisites: PS-I standing

**PPRA 1522 Introduction to Pharmacy Practice Experience I: Community**
This course introduces the student to the philosophy, socialization, and practice of the profession of pharmacy through experiences in a community pharmacy practice environment. This course will meet for a weekly eight hour site visit to an assigned community pharmacy for an introductory pharmacy practice experience. Guided exercises in the community practice environment will introduce the student to the basics of practice and serve as a foundation for advanced pharmacy practice experiences.
3 credits
Prerequisites: PPRA 1501 Introduction to Pharmacy Practice

**PPRA 1523, 1621, 1623, 1624 Introductory Pharmacy Practice Experience Longitudinal I, II, III, IV**
In the Introductory Pharmacy Practice Experience Longitudinal, the student participates in the longitudinal care of four patients over the four quarter sequence. Emphasis will be placed on the changing needs of the patients and insuring continuity of care. The student will learn to effectively communicate with the patient and other health care providers while collecting relevant health care information about the patient. The student will develop affective components necessary to become a caring pharmacist. All four courses in this sequence must be taken sequentially.
Prerequisites:
- PPRA 1523 Introductory Pharmacy Practice Experience Longitudinal I, 1.5 credits
- Prerequisites for PPRA 1621 Introductory Pharmacy Practice Experience Longitudinal II, 0.5 credits: PS-II standing and concurrent enrollment in or completion of PPRA 1611 Pharmacotherapeutics I
- Prerequisites for PPRA 1623 Introductory Pharmacy Practice Experience Longitudinal III, 0.5 credits: PS-II standing and concurrent enrollment in or completion of PPRA 1612 Pharmacotherapeutics II
- Prerequisites for PPRA 1624 Introductory Pharmacy Practice Experience Longitudinal IV, 1.5 credits: PS-II standing and concurrent enrollment in or completion of PPRA 1613 Pharmacotherapeutics III

**PPRA 1601, 1701, 1801 Reflective Portfolio II, III, IV**
This course sequence provides students with a framework to document regular self assessment of his/her progressive achievement of curricular outcomes. Lecture topics include review of reflective writing, introduction to longitudinal reflective writing, defining evidence, common mistakes made in previous portfolios, and the value of continued self-assessment and planning for continuous professional development. The PS-II and PS-III workshops focus on portfolio entries that demonstrate progressive achievement of curricular outcomes and assessment of entries.
Prerequisites:
- Prerequisites for PPRA 1601 Reflective Portfolio II, 0.5 credits: PS-II standing
- Prerequisites for PPRA 1701 Reflective Portfolio III, 0.5 credits, PS-III standing
- Prerequisites for PPRA 1801 Reflective Portfolio IV, 0.5 credits, PS-IV standing

**PPRA 1611, 1612, 1613, 1711, 1712, 1713 Pharmacotherapeutics I, II, III, IV, V, VI**
Pharmacotherapeutics is a required course sequence of six courses offered in the second and third professional years. It emphasizes the principles of pharmacotherapy as they relate to rational drug product selection, drug and disease state evaluation and monitoring, and the development of a patient
care plan. Each course includes lectures as well as workshop sessions in which the student groups are guided by a faculty facilitator to apply problem-solving strategies and evidence-based medicine to realistic patient cases, and to develop patient care plans.

Prerequisites:
- Prerequisites for PPRA 1611 Pharmacotherapeutics I, 5 credits: PS-II Standing
- Prerequisites for PPRA 1612 Pharmacotherapeutics II, 5 credits: PS-II standing, PPRA 1611 Pharmacotherapeutics I and PHAR 1641 Pharmacology I, Concurrent enrollment in or prior completion of PHAR 1642 Pharmacology II, PSCI 1602 Chemical Principles of Drug Action I
- Prerequisites for PPRA 1613 Pharmacotherapeutics III, 5,5 credits: PS-II standing, PHAR 1642 Pharmacology II, PPRA 1612 Pharmacotherapeutics II, PSCI 1602 Chemical Principles of Drug Action I, Concurrent enrollment in or prior completion of PHAR 1643 Pharmacology III and PSCI 1603 Chemical Principles of Drug Action II
- Prerequisites for PPRA 1711 Pharmacotherapeutics IV, 5 credits: PS-III standing, Concurrent enrollment in or prior completion of PSCI 1751 Chemical Principles of Drug Action III
- Prerequisites for PPRA 1712 Pharmacotherapeutics V, 5 credits: PS-III standing, PPRA 1711 Pharmacotherapeutics IV, PSCI 1751 Chemical Principles of Drug Action III
- Prerequisites for PPRA 1713 Pharmacotherapeutics VI, 5 credits: PS-III standing, PPRA 1712 Pharmacotherapeutics V, PSCI 1752 Chemical Principles of Drug Action IV

PPRA 1622 Introductory Pharmacy Practice Experience II: Health Systems
Students will explore the philosophy and practice of health system pharmacy through didactic lectures, workshop assignments and on site experience at an assigned practice site under the guidance of a preceptor. Students will be introduced to technical pharmacy skills, hospital pharmacy management, distributive systems, quality assurance and the role of the pharmacist in the health care team. Students will explore career options within health care systems.
2 credits
Prerequisites: PS-II standing, PPRA 1631 Institutional Pharmacy Practice

PPRA 1631 Institutional Pharmacy Practice
This course introduces students to the practice of pharmacy in institutional settings, focusing on hospitals and acute care settings. The use and preparation of and regulations surrounding parenteral medications will be described. Students will learn about other issues surrounding the safe and effective use of medications in the institutional setting, including medication reconciliation, accreditation, and computerized physician order entry (CPOE) systems.
3 credits
Prerequisites: PS-II Standing

PPRA 1721 Introductory Pharmacy Practice Experience III: Clinical
This course provides students the opportunity to practice the principles and skills in clinical pharmacy through practical experiences, practice simulation, and workshops. Site visits to various hospitals and chronic care sites allow the students to experience and apply the lessons learned in the complementary didactic courses in real practice environments.
3 credits
Prerequisites: PS-III standing

PPRA 1731 Healthcare Communications II
This course focuses on the development of practical skills necessary for effective communication in the health care setting; adding to the students' foundational communication skills, via integration of therapeutic knowledge into their communication with patients, caregivers, and health care professionals. Students gain counseling proficiency on a variety of dosage forms across a range of therapeutic drug classes and experience communication with specific populations (based on age, culture and/or socioeconomic differences, heightened sensitivity, etc.) The students learn about behavior modification strategies and implementation of medication therapy management.
2 credits
Prerequisites: PS-III standing

PPRA 1742 Clinical Skills in Pharmacy Practice
This course emphasizes the pharmacist's role in the community/ambulatory care practice setting. In this course, the principles of self-care and nonprescription pharmacotherapy are examined. Students learn a systematic approach to assessing, triaging and managing self-treatable conditions. The use of medication devices, home monitoring kits, and point of care testing devices is also included.
3 credits
Prerequisites: PS-III Standing

PPRA 1751 Pharmacy Management
Pharmacists in all practice settings use a variety of management skills on a daily basis. This course introduces students to the role of management within pharmacy and exposes them to a variety of theories, techniques, and tools used by pharmacists to ensure that patient care is delivered in an effective and efficient manner.
4 credits

PPRA 1752 Pharmacy Law/Ethics
The basic principles of law are reviewed as they relate to the practice of pharmacy under federal, state, and local regulations. The special problems involving the control of
narcotics, poisons, and other controlled substances are reviewed. Some laws relative to business activities and discussions of professional ethics are also included.

3 credits
Prerequisites: PS-III standing

PPRA 1763 Quality Assurance and Effective Pharmacy Practice
This course will acquaint the student with the nature of quality assurance in health care and its implications for pharmacy practice. Topics addressed include: quality and the future of health care, recognizing and defining quality problems, identifying quality problems (Root Cause Analysis & Healthcare Failure Mode and Effect Analysis), risk management and medication errors, medication error reporting, measurement of safety and quality, the system’s perspective, and implementing changes to enhance quality.

3 credits
Prerequisites: PS-III standing

PPRA 1783 Clinical Pharmacokinetics
This course focuses on the application of pharmacokinetic principles for the purpose of optimizing drug therapy. Lectures and workshops are used to teach 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. Patient cases or problem sets will be distributed weekly and used to give practice in the application of principles. Workshops and quizzes will be conducted to assess the understanding of principles.

3 credits
Prerequisites: PS-II standing

PPRA 1885 Elective Advanced Pharmacy Practice Experience
Pharmacy students may select from a list of electives with a variety of non-patient care foci or an additional clinical specialty pharmacy practice experience. Pharmacy students under the supervision of an adjunct faculty or full faculty member will gain experience in their chosen elective area. The student will complete 3 major projects with focus applicable to the site. The student will develop a philosophy of practice regarding the role of the pharmacist as a member of the healthcare team.

9 credits

PPRA 1886 Community Advanced Pharmacy Practice Experience
Pharmacy students under the supervision of an adjunct faculty member will gain experience in community pharmacy practice including dispensing procedures, pharmacy law, practice management and OTC pharmacotherapy assessment. The student will assess drug therapy, monitor clinical interventions, practice counseling and patient care skills, and complete a journal club and a case presentation. The student will develop a philosophy of practice regarding the role of the pharmacist as a member of the healthcare team.

9 credits

PPRA 1887 Hospital Advanced Pharmacy Practice Experience
Pharmacy students under the supervision of an adjunct faculty will gain experience in hospital pharmacy practice, and interactions with other health care providers. The student will participate in drug therapy assessment, patient care activities and monitor outcomes in various patient populations. The student will complete case presentations and other assignments. The student will develop a philosophy of practice regarding the role of the pharmacist as a member of the healthcare team.

9 credits

PPRA 1888 General Medicine Advanced Pharmacy Practice Experience
Pharmacy students under the supervision of an adjunct or full faculty member will gain experience in general medicine pharmacy practice including practice management and interactions with other health care providers, participate in drug therapy assessment, patient care activities and monitor outcomes in various patient populations. The student will complete a journal club, a case presentation and drug information paper. The student will develop a philosophy of practice regarding the role of the pharmacist as a member of the healthcare team.

9 credits

PPRA 1889 Ambulatory Care Advanced Pharmacy Practice Experience
Pharmacy students under the supervision of an adjunct or full faculty member will gain experience in ambulatory care pharmacy practice, including practice management, interactions with other health care providers, participation in drug therapy assessment, patient care activities, and monitoring outcomes in various patient populations. The student will complete a journal club, case presentation and drug information paper. The student will develop a philosophy of practice regarding the role of the pharmacist as a member of the healthcare team.

9 credits

PPRA 1890 Clinical Specialty Advanced Pharmacy Practice Experience
Pharmacy students under the supervision of an adjunct or full faculty member will gain experience in clinical specialty pharmacy practice, including practice management, interactions with other health care providers, participation in...
drug therapy assessment, patient care activities, and monitoring outcomes in various patient populations. The student will complete a journal club, case presentation and drug information paper. The student will develop a philosophy of practice regarding the role of the pharmacist as a member of the healthcare team.

9 credits

PSCI 1501 Reflective Portfolio I
This course provides students with a framework to document regular self-assessment of his/her progressive achievement of curricular outcomes. Lecture topics include an introduction to the e-portfolio platform, reflective writing, defining evidence, and the value of self-assessment. Workshops will focus on baseline assessment.
1 credit

PSCI 1511 Pharmaceutical Calculations
This course provides an introduction to the practice of pharmacy with an emphasis on the mathematical calculations that are essential to compounding and dispensing drugs and that are commonly encountered in subsequent pharmacy courses.
3 credits
Prerequisites: PS-I standing

PSCI 1512 Pharmaceutics I: Physical Pharmacy and Dosage Form Design
This course discusses the types and characteristics of pharmaceutical dosage forms and the physicochemical principles involved in design, development and formulation of traditional dosage forms. Topics include but are not limited to acids, bases, and buffers; solubility, dissolution, and distribution phenomena; preformulation considerations; solid, liquid, and semisolid dosage forms; and ophthalmic delivery.
2 credits

PSCI 1513 Dosage Form Laboratory
This course is focused on discussing and learning to prepare various extemporaneously compounded dosage forms, while understanding, adhering to, and fulfilling all legal requirements.
1 credit
Prerequisites: PSCI 1511 Pharmaceutical Calculations

PSCI 1514 Pharmaceutics II: Drug Delivery and Dosage Form Design
This course discusses the types and characteristics of pharmaceutical dosage forms and the physicochemical principles involved in design, development and formulation of traditional dosage forms. Topics include: suppositories, transdermal, pulmonary and nasal delivery; sterility and microbial contamination; injectable products; liposomes; nanoparticles; implants and specialized devices; biologics and biotechnology-derived products; radiopharmaceuticals; packaging considerations, pediatric and geriatric formulation considerations; and selection of a drug delivery system.
1.5 credits
Prerequisites: PSCI 1512 Pharmaceutics I: Physical Pharmacy and Dosage Form Design

PSCI 1515 Introduction to Biopharmaceutics and Pharmacokinetics
Topics covered in this course include: mathematical descriptions of the time course of drug absorption; distribution and elimination; the physicochemical properties of drugs and the relevant physiologic factors that affect drug absorption, distribution, metabolism, and excretion; the relationship between drug concentration and clinical responses; the pharmacokinetic variability caused by differences in body weight, age, sex, genetic factors, diseases, and drug interactions; applications of pharmacokinetics and pharmaceutics to clinical situations.
3.5 credits
Prerequisites: PSCI 1512 Pharmaceutics I

PSCI 1601 Introduction to Drug Structure Evaluation
A review of the organic functional groups (including heterocycles) found in drug molecules and their properties is conducted. Amino acids are introduced as structural components of biomolecules and/or biological targets for drug action. The drug structure evaluation process includes evaluation of the acid/base properties, binding interactions, and metabolic transformations for each functional group. Functional group interaction(s) with amino acid side chains is foundational to learning structure activity relationships later in the course sequence.
2 credits
Prerequisites: PS-II Standing

PSCI 1602, 1603, 1751, 1752 Chemical Principles of Drug Action I, II, III, IV
Concepts of drug-target interactions and structure activity relationships are discussed for all of the major classes of drugs. Classification is based on a drug’s mechanism of action at its biological target, e.g., messenger receptors, enzymes, nucleic acids, and excitable membranes or other biopolymers. Principle routes of drug metabolism, drug transport and the prediction of drug-drug, drug-disease, drug-herb and drug-food interactions based on each drug’s chemical properties are also discussed. Examples of drug action in the central nervous system, autonomic nervous system, cardiovascular system, endocrine system, and immune system are discussed, as well as anti-infective agents, anti-neoplastic agents, and the impact of biotechnology on drug design.
Prerequisites:
Prerequisites for PSCI 1602 Chemical Principles of Drug Action I, 4.5 credits: Completion of PSCI 1601 Introduction To Drug Structure Evaluation and PHAR 1641 Pharmacology I, PS-II standing, Concurrent enrollment in PHAR 1642 Pharmacology II

Prerequisites for PSCI 1603 Chemical Principles of Drug Action II, 4 credits: Completion of PSCI 1602 Chemical Principles of Drug Action I and PHAR 1642 Pharmacology II, PS-II standing


PSCI 1722 Pharmaceutical Biotechnology
Biotechnology-derived products are increasingly being used to treat diabetes, various types of cancer, blood disorders, growth deficiencies, renal failure, infections, and multiple sclerosis. This course is an introduction to biotech products, from recombinant DNA and antisense technology to monoclonal antibodies. Production, storage, and handling will be discussed as they relate to analytical techniques, patient education and counseling, and therapeutic use. Topics include gene therapy, stem cell research, cloning, biopharming, pharmacogenomics, and the Human Genome Project.
2 credits
Prerequisites: PS-III Standing

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.

BIOC 1445 Principles and Practices of Enteral and Total Parenteral Nutrition
This course surveys the biochemical, metabolic, and nutritional sciences underlying the provision of nutritional support, and provides a basic introduction to the clinical practices involved in its implementation. During the course, students apply information provided in lectures to the provision of nutritional support in selected clinical case studies.
1 credit

BIOC 1447 Nutrition in Preventive 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

Prerequisites: BIOC 1551 and 1552 Biochemistry I and II

MICR 1304 Agents of Biological and Chemical Warfare and Terrorism
The course is 20 hours of didactic lecture, but Web-based and video presentation is also used. Discussion sessions highlight the potential use of biological and chemical agents as agents of terrorism, when to suspect their use, signs and symptoms of each agent, the standard medical response to biological and chemical terrorism, and the factors involved in planning for and protecting against a biological and chemical weapons attack. In addition, historical and hypothetical case scenarios are also presented.
2 credits
Prerequisites: MICR 1510 Infectious Diseases and Their Etiologic Agents

PHAR 1410 Pharmacologic Aspects of Drug Abuse
This elective provides an in-depth understanding of the pharmacology of the common drugs of abuse including alcohol, cocaine, stimulants, hallucinogens, and opioids. Particular emphasis is given to basic pharmacokinetic and pharmacodynamic mechanisms as they relate to the effects of drugs and to the development of drug tolerance and dependence. Current theories regarding the physiologic basis of drug-seeking behavior and the development of drug dependence are presented. In addition, various social, legal, and ethical aspects of the drug abuse problem are considered.
2 credits

PHAR 1420 Medical Spanish
This course provides the student with the vocabulary necessary to understand and converse in the fields of medicine and health care in Spanish. This course has been designed to aid the medical student in communicating with the Latino patient, understand cultural attitudes, which may impact on the required medical care. Listening, comprehension, and conversational skills will be stressed through dialogues and oral presentations by students. Critical learning skills that students will need to develop to accomplish the intended outcome are cooperative learning and effective group dynamic skills.
2 credits
Prerequisites: Two years of high school or college Spanish

PHAR 1430 Cardiovascular Pharmacology
Cardiovascular (CV) disease is a national health problem of major consequence. Its treatment is one of the principal problems facing modern medicine. This elective is designed to familiarize the student with the most significant of all CV diseases, i.e., atherosclerosis; and potential anti-atherosclerotic effectiveness and mechanisms of various CV drugs and non-drug forms of therapy. This course is offered
with Pass/Fail grading only.
2 credits

**PPRA 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 PPRA or PSCI 1301 may be applied toward elective requirements for the Pharm.D. degree.
1-3 credits

**PPRA 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
Prerequisites: PS-II or PS-III standing

**PPRA 1303 Advanced Internal Medicine**
This course will concentrate on issues related to the care of general internal medicine patients in an acute inpatient setting. Topics in the course will focus on the diagnosis, pharmacotherapy, and management of this specific patient population. New topics will be discussed and topics covered in core courses will be augmented.
2 credits
Prerequisites: PPRA 1611, 1612, 1613 and 1711 Pharmacotherapeutics I, II, III, and IV

**PPRA 1304 Advanced Internal Medicine Practicum**
This course will allow for small group discussion and application of topics related to the care of general internal medicine patients in an acute inpatient setting. Topics in the course will be those taught in the Advanced Internal Medicine elective.
1 credit
Prerequisites: PPRA 1611, 1612, 1613 and 1711 Pharmacotherapeutics I, II, III, and IV, Concurrent enrollment in PPRA 1303 Advanced Internal Medicine

**PPRA 1305 Pharmacy: Its History and Heroes**
This course begins with a general overview of pharmacy throughout history, with special emphasis on Illinois pharmacy and pharmacy associations. The second half of the course consists of student-led presentations on individuals who can be considered heroes in the profession who have been instrumental in the adaptation of our healthcare system to provide access to quality healthcare.
2 credits

**PPRA 1308 Introduction to Teaching and Learning Issues**
Throughout their careers pharmacists are called upon to teach. Many pharmacists present continuing education talks, precept pharmacy students, and present community service seminars. To be effective at these tasks, it is essential for the pharmacist to have a good understanding of learning theory and basic tools for teaching. This course is designed to introduce students to learning theory and basic tools for teaching. Students learn through practice. As new concepts are introduced, students will apply them in either homework assignments or in-class presentations.
1 credit
Prerequisites: PS-II or PS-III standing

**PPRA 1309 Pediatric Pharmacotherapy**
This elective concentrates on specific issues related to the treatment and care of pediatric patients. By following a mock patient from birth through his/her teen years, the elective is designed to introduce the students to common childhood illnesses and the treatments for these conditions, drug delivery systems used for pediatric patients, current controversies in pediatric care, and commonly used over-the-counter medications, and alternative therapies. Active learning and projects will be utilized.
2 credits
Prerequisites: PS-III standing

**PPRA 1310 Landmark Trials in Primary Care**
This course focuses on reviewing the clinical trial data that support therapeutic recommendations in primary care. Students in this course critically evaluate landmark clinical trials, identifying rationale for current therapeutic guidelines and inconsistencies with trial data and current guidelines. The focus is on interpreting clinical trial data and applying the data to patient cases to support therapeutic recommendations.
2 credits
Prerequisites: PS-III standing, PPRA 1711 Pharmacotherapeutics IV

**PPRA 1312 Psychiatric Pharmacy: Beyond the Basics**
This course provides insight into psychiatric disorders. Topics include psychiatric patient interviews, movement disorder assessment, pediatric psychiatry, and personality disorders. Current clinical controversies, new research, and psychiatric-related films, documentaries, and popular literature will be discussed.
2 credits
Prerequisites: PS-III standing

**PPRA 1313 Geriatric Patient Care**
The course reviews foundational material essential in caring for geriatric patients. Medical, psychological and social issues commonly encountered in the aging adult are covered. The course offers students the opportunity to further develop problem solving skills in providing geriatric patient care.
2 credits
Prerequisites: PS-III standing

**PPRA 1314 Practical Applications of Women's Health Issues**
This elective concentrates on specific issues related to the optimal delivery of women's health care. Topics covered include gender-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
Prerequisites: PS-III standing

**PPRA 1315 Advanced Clinical Diabetes Management**
This course focuses on specific issues related to the delivery of in-depth pharmaceutical care in the management of diabetes. Emphasis is on pharmacotherapeutic issues not covered in the general therapeutic course. Students will practice application of the material through patient cases and hands-on experience. Topics discussed will include a review of the non-insulin diabetes treatments, prevention of diabetes complications, treatment of gestational diabetes, use of modern insulin combinations and pump therapy, insulin initiation and adjustment, and evaluation of insulin delivery devices.
2 credits
Prerequisites: PS-III standing, PPRA 1711 Pharmacotherapeutics IV

**PPRA 1316 Advanced Infectious Disease**
This course provides students an opportunity to expand their knowledge in the area of infectious diseases. A case-based approach will be utilized to foster an interactive learning experience. Students will build upon their current knowledge of infectious diseases through discussions and debates related to evidence-based medicine, policies and procedures, and the clinical management of infectious disease-related issues. Mock clinical rounds will be incorporated.
2 credits
Prerequisites: PS-III standing

**PPRA 1317 End-of-Life Care**
This course covers end of life care from four different perspectives: managing the system, managing the patient, managing the caregiver, and managing attitudes and feelings. Pharmacotherapeutic aspects of death and dying are presented. The course is delivered via lecture and interactive discussion.
2 credits
Prerequisites: PS-II or PS-III standing

**PPRA 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. Vital aspects of deaf culture are also discussed.
1 credit

**PPRA 1319 Introduction to Nuclear Pharmacy**
This course exposes the pharmacy student to the many areas of nuclear pharmacy and nuclear medicine. During the course, the student is provided with the training fundamentals that nuclear pharmacists encounter.
1 credit

**PPRA 1320 Oncology Therapeutics**
This course combines lectures and group discussions of the major oncology topics. Lectures will address the biology and pathophysiology of cancer and the rationales for the types of chemotherapy treatments. The importance of the pharmaceutical role of supportive care in cancer will also be discussed.
2 credits
Prerequisites: PS-III standing

**PPRA 1321 Medication Management in Primary and Secondary Schools**
This course describes medication management in schools including transfer, storage, administration, use, and disposal. It addresses five important related issues: documentation, delegation of medication management responsibility, liability concerns, therapeutic issues, and the availability of information needed to adequately perform medication management. It reviews medication management guidelines and relevant conceptual frameworks, including rational drug therapy and polycentric authority, and provides a summary of the empirical literature. It shows that pharmacy has been involved very little in this problem in the past, and specifies ways that individual pharmacists and pharmacies can get involved in medication management in schools and improve the situation.
2 credits
 PPRA 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
Prerequisites: PPRA 1611 Pharmacotherapeutics I

 PPRA 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. Topics include a review of the current empirical literature on the impact of spirituality and religion on medical health and psychological well-being, the role of spirituality in health care, review of different spiritual perspectives, the role of the hospital chaplain, and spiritual assessment. Expert guest presenters will lead discussions on how belief systems affect the patient’s perception of health, necessary spiritual considerations in patient care and therapeutic dilemmas produced by spiritual beliefs
1 credit
Prerequisites: PS-III standing

 PPRA 1325 Topics in Career Management
The goal of this course is to gain an awareness of a career as a process requiring planning, development, and management. Career-related topics will be presented and discussed, including how career-related discussions are affected by life stages, career self-assessment, job hunting, networking, professional etiquette, resume and cover letter writing, interviewing, and job-related benefits.
2 credits
Prerequisites: PS-III standing

 PPRA 1326 Advanced Over the Counter Medications
The purpose of this course is to provide the student with the knowledge and skills necessary to assist in addressing the self-care needs of the patient. Emphasis will be placed on initial assessment of self-limited problems with home diagnostic kits and treatment utilizing non-prescription drugs and life style changes.
1 credit
Prerequisites: PS-II standing

 PPRA 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, pharmaco kinetics, and drug information. This course is designed to introduce students to selected 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
Prerequisites: PS-III standing

 PPRA 1328 Home Infusion Therapy
This course is designed as an introduction to home health care with an emphasis on the provision of infusion therapy to patients in their homes or other alternate sites. Sessions will be held in a discussion format and will explore the interdisciplinary care of patients prescribed outpatient parenteral therapies. Case studies will be used to illustrate key elements in the patient management process.
2 credits

 PPRA 1329 Advanced Physical Assessment
This course extends students’ physical assessment skills. Student learning will be facilitated through lectures with hands-on training. Lectures focus on the rationale behind the physical assessment method and a description of the techniques employed and their place in practice (diagnosis and monitoring). Techniques used for drug therapy monitoring by pharmacists will be discussed. Workshops will provide students with the opportunity to practice and perfect physical assessment skills. The class will be organized based upon organ systems and specific disease processes.
2 credits
Prerequisites: PS-III standing

 PPRA 1330 Practical Applications of Men’s Health Issues
This course emphasizes the disparities that exist in men’s health and the unique needs of male patients in the healthcare setting. Through lectures and group discussions, students will learn how to communicate about and promote healthcare in men and utilize literature interpretation skills to formulate clinical recommendations about current topics in men’s health.
2 credits
Prerequisites: PS-III standing, PPRA 1711 Pharmacotherapeutics IV

 PPRA 1331 Lifestyle Modifications in Pharmacotherapy
 Appropriately managing lifestyles is a part of successful pharmaceutical care. This course highlights major areas of lifestyle modifications for all patients including nutrition, physical activity, and weight management, plus management of lifestyles in chronic diseases such as hypertension, diabetes, and dyslipidemia. The course expands on the concepts of pharmaceutical care and patient assessment introduced in prior courses with respect to lifestyle. Case studies, student projects, and lectures will be utilized to deliver the course.
2 credits
Prerequisites: PS-III standing
PPRA 1333 Global Pharmaceutical Sciences
This course explores both macro and micro aspects of global pharmaceutical systems including the interaction of systems and environments and the functions and roles of pharmacists and other healthcare professionals. The course will include discussions of global and international situations and their effects on the local healthcare delivery systems. The impact of social, cultural, political, economic, and technological changes on the development of various global pharmaceutical systems will be addressed.
2 credits

PPRA 1334 Disease and Practice Management in Ambulatory Care
This course focuses on the evolving role of the pharmacist in delivery care in ambulatory care settings. Student pharmacists will explore ambulatory care topics and methods to implement services through interactive discussions and case-based learning both in the classroom and online. Discussions and cases build critical thinking and problem solving skills. Emphasis is placed on disease management and approaches to practice management.
2 credits
Prerequisites: PS-III standing

PPRA 1335 Introduction to Managed Care Pharmacy
This course provides a complete overview of managed care pharmacy and covers the history of managed care, prescription benefit management, pharmacy benefit design, mail service pharmacy, formulary management, disease state management, pharmacoeconomics, outcomes research, and e-prescribing. Students will learn the tools that are used in pharmacy cost management and disease management to improve the overall healthcare of a member.
1 credit

PPRA 1336 Topics in Leadership and Management
This course is designed to introduce students to leadership concepts and theory and is intended to expand the students’ knowledge and their leadership potential. The course will review leadership and management principles through discussion of current leadership literature.
1 credit

PPRA 1337 Topics in Community Pharmacy Finance and Marketing
This course is designed to introduce students to basic concepts of finance and marketing applied to the community pharmacy setting. Emphasis will be placed on understanding profit and loss statements, marketing concepts, and factors that contribute to overall business success in this setting. Students will expand their knowledge and experience in developing a written business plan that can be implemented and utilized throughout the community pharmacy sector.
2 credits
Prerequisites: PPRA 1751 Pharmacy Management

PPRA 1338 Epidemiologic Investigation of Medicine Use
Epidemiologic methods are finding increase use to obtain answers to questions not easily found through traditional clinical research pathways like randomized trials. As evidence-based medicine and population-based care is becoming increasingly important, a firm understanding of epidemiologic principles is necessary for healthcare 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
Prerequisites: PPRA 1513 Principles of Evidence-Based Pharmacy Practice

PPRA 1339 Anticoagulation in Clinical Practice
This elective course provides students with an overview of major topics in anticoagulation management encountered in clinical practice. Topics include prophylaxis and treatment of venous thromboembolism (VTE), anticoagulation in special patient populations, treatment plans requiring modification of anticoagulation, and different practice models for anticoagulation monitoring. Students will develop a working knowledge and skill set required to provide pharmacy-managed anticoagulation services in both the inpatient and ambulatory settings.
2 credits
Prerequisites: PPRA 1613 Pharmacotherapeutics III

PPRA 1340 Advanced Topics in HIV Medicine
This elective course is intended to provide students with the opportunity to learn more about Human Immunodeficiency Virus infection, its treatment and issues affecting people living with HIV infection. Topics to be covered include pathophysiology, epidemiology, pharmacology and social issues related to HIV. Various complications of HIV, including opportunistic infections, will also be discussed.
2 credits
Prerequisites: PPRA 1712 Pharmacotherapeutics V

PPRA 1341 Advanced Cardiology
This course will provide pharmacy students with an opportunity to learn about more selected cardiovascular diagnosis, procedures, and therapy. New topics will be discussed and topics covered in core courses will be augmented. Lectures will focus on the role of pharmacologic agents in diagnostic and invasive cardiology procedures from basic concepts to patient’s bedside. Active learning strategies are highly employed.
2 credits
Prerequisites: PPRA 1613 Pharmacotherapeutics III

PPRA 1342 Postgraduate Training Opportunities for Pharmacists
The course reviews postgraduate training opportunities for pharmacists with a focus on pharmacy residencies. Students will learn appropriate steps to secure a pharmacy residency and the basic expectations of different residency programs. A variety of learning techniques will be employed, which include lectures, class discussions and in-class assignments. Students will be evaluated based on attendance, class participation and submission of a high-quality curriculum vitae and other written reflections as assigned.
1 credit

PPRA 1344 Therapeutic Management of Poisoning and Drug Overdose
Pharmacists provide an important role in the treatment of drug overdose. This course introduces students to the clinical presentation and therapeutic management of various acute overdose situations, covers basic principles of poison control, and addresses the management of the following overdose types: opioids, illicit drugs, benzodiazepines, barbiturates, stimulants, alcohols, OTCs, cardiovascular agents, anticholinergics, and others. The course will be lecture based with many active learning opportunities.
1 credit
Prerequisites: PS-II Standing

PSCI 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 PPRA or PSCI 1301 may be applied toward elective requirements for the Pharm.D. degree.
1 - 3 credits

PSCI 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

PSCI 1370 Pharmaceuticals and Personal Care Products in the Environment
This elective provides an understanding as to what can happen to the environment in the presence of pharmaceuticals and personal care products (PPCPs). Lectures focus on identification of how PPCPs are introduced into the environment, mechanisms available to limit this type of pollution, actual and potential cause/effect relationships between specific products/byproducts and types of wildlife, as well as actual and potential cause/effect relationships between specific products/byproducts and humans (e.g. reproductive effects).
1 credit
Prerequisites: PS-III standing

PSCI 1371 Alternative Therapies and Natural Products
Alternative therapies are being used by a growing percentage of the population and are becoming more visible to mainstream medical practice. Health care professionals should develop the knowledge and skills necessary to aid the patient in making rational decisions about the use of alternative therapies. This elective focuses on the utility of drugs from natural sources in today’s practice environment and surveys the products of animals, plants, microbes that will impact pharmacy tomorrow.
3 credits

PSCI 1372 Contemporary Compounding
Contemporary compounding is an elective course for students who are interested and want to develop an expertise in this field of practice. Some theory is presented with emphasis on the development of excellent compounding skills that are applicable to contemporary pharmacy practice.
3 credits

PSCI 1373 Drug Delivery Systems in Patient-Centered Care
This course focuses on the appropriate use of drug delivery systems to ensure appropriate response to therapy of medications used in a variety of disease states. Route of administration, formulation design, bioavailability and bioequivalence will be discussed with the intent to discover the therapeutic impact of formulation. Lectures provide insight on the drug delivery systems which provide a therapeutic response while focusing on topics within one disease state or system.
2 credits
Prerequisites: PS-III standing

PSCI 1374 Advanced Topics in Medicinal Chemistry
This course provides an overview of several areas of current interest in the field of medicinal chemistry. Also presented in-depth will be certain specialized topics that received limited coverage in the required medicinal chemistry courses.
1 credit
Prerequisites: PS-III standing

PSCI 1375 Vitamins, Minerals, and Nutritional Support
This module provides an overview of the mechanisms of action, 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, and nutritional support/supplement selection for infants and adults. The mechanism-based approach used in this module allows the student to more easily identify, organize, and recommend various therapeutic agents for a wide variety of patients.
2 credits
Prerequisites: PS-III standing

PSCI 1376 Development of Newly Approved Drug Therapies
The FDA 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 new 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 be covered.
2 credits
Prerequisites: PS-II standing

PSCI 1377 Methods in Drug Discovery
Students will participate in a research experience focused on the general principles and current approaches involved in drug discovery. The course will combine lecture based teaching with a hands-on approach to learning. Topics covered will include many of the screening approaches currently employed at pharmaceutical companies to identify novel compounds. In addition to lectures covering experimental design, students will learn basic bench skills, and be expected to perform literature reviews and data analysis.
2 credits
Prerequisites: PS-II or PS-III Standing

PSCI 1378 Pharmacogenomics and Personalized Medicine
Pharmacogenomics provides tailored drug selection and dosage based on a person’s genetic makeup. This course will focus on clinical applications of pharmacogenomics. Students completing this course will gain an understanding of how genetic differences among individuals can impact the outcome of drug therapy in both positive and negative ways.
2 credits
Prerequisites: PS-III Standing

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 Promotion and Graduation Committee
The Student Promotion and Graduation Committee (SPGC) is composed of the Assistant 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:
   a. be placed on academic probation for a specified period of time;
   b. take an alternate approved course offered at another college or university;
   c. repeat the course(s) in which there is a failure when the course is offered again in the curriculum;
   d. be placed in an extended program; or
   e. be dismissed from the College.
Students must maintain an annual grade point average of 2.00 in their professional program to remain in good academic standing. If a student’s annual grade point average drops below 2.00 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 2.00 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. 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 to retake only once in the curriculum.

Failure (F or WF) in 3 or more courses in one academic year or 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 2.00 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 CGP.

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 2.00, 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 2.00 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 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 2.00 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.

**Prerequisites for Courses**

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 with the course description in the catalog. On a case-by-case basis, prerequisites may be waived upon approval by the chair of the department that delivers the course.

**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 Office of Experiential Education. 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 a letter 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 called in. 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.

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 2.00. 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 2.00. 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 2.00.

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.

Computer Requirements
All first year students starting in Fall 2010 are provided with a laptop computer through University Information Technology Services.

Dean’s List
Following each quarter, the Chicago College of Pharmacy recognizes students who have distinguished themselves by achieving a GPA of 3.50 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 Advisor Program
The Chicago College of Pharmacy assigns a faculty advisor to students in each entering class whose role is to assist with academic and nonacademic concerns. In addition to these faculty advisors, staff in the CCP Dean’s Office 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 advisor selected from the faculty of CCP. Students will likely have the same advisor throughout their academic careers.

During orientation, advisors meet their new students in groups of approximately 10 students. These groups may serve
as the workshop groups for courses within the curriculum. CCP faculty advisors 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 pharmacy profession.
6. Reviewing students’ reflective portfolio.

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 "I" 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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points (per credit)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.000</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>3.670</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>3.330</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.000</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>2.670</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>2.330</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.000</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>0.000</td>
<td>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 &quot;I&quot; 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.</td>
</tr>
<tr>
<td>IP</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>P</td>
<td>0.000</td>
<td>Pass (for a pass/fail course); designation indicates that the student has made satisfactory progress or completed required coursework satisfactorily. Grade of &quot;P&quot; is counted toward credit hour accruals for graduation but does not affect GPA calculations.</td>
</tr>
<tr>
<td>F</td>
<td>0.000</td>
<td>Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of &quot;F&quot; is counted toward credit hour accruals as attempted but not completed. Grade of &quot;F&quot; is calculated into the GPA (quality points are lowered due to unsuccessful course completion).</td>
</tr>
<tr>
<td>W</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>W/F</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>AU</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>AP</td>
<td>0.000</td>
<td>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.</td>
</tr>
</tbody>
</table>
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**

<table>
<thead>
<tr>
<th>Grade Point Average</th>
<th>Graduation Honor</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 3.90</td>
<td>Summa cum laude</td>
</tr>
<tr>
<td>3.75 - 3.89</td>
<td>Magna cum laude</td>
</tr>
<tr>
<td>3.50 - 3.74</td>
<td>Cum laude</td>
</tr>
</tbody>
</table>

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-III student with outstanding performance in the CCP pharmacy law course.
Charles R. Walgreen Scholarships
Scholarships are awarded to two PS-III or PS-IV students who are in good academic standing, excel in community pharmacy practice, and have the intention to pursue advanced patient care service programs in the community setting.

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 Admission Scholarship
Scholarships are awarded to six newly admitted pharmacy students with exemplary pre-pharmacy coursework performance. Student recipients are selected by the Admissions Committee. The scholarship is renewed provided that the student maintains performance excellence during the CCP program.

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, pharmaceutics, pharmacy administration, or pharmacotherapeutics.

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 Scholarships
Three scholarships are awarded each year to students who are in good academic standing and have demonstrated interest in community pharmacy practice.

CVS Minority Student Scholarship
A scholarship is awarded each year to an under-represented minority student who has a demonstrated interest in community pharmacy practice.

John and Angie Dik Scholarships
Scholarships are awarded to two 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 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
A copy of Drug Interaction Facts, Drug Facts and Comparisons, American Drug Index, Patient Drug Facts, and a set of marble bookends 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 Foundation Student Leadership Award
This monetary award and one-year membership in IPHA is given to the graduating student who promotes pharmacy through leadership and involvement in professional associations.

Jewel-Osco Drug Scholarships
Nine scholarships are awarded each year to pharmacy students interested in entering chain community pharmacy.

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 will 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.

Natural Medicines Comprehensive Database Recognition Award
A reference text is awarded to a graduating student who has demonstrated excellence in the area of natural medicines. This award is sponsored by the Pharmacist’s Letter.

Natural Standard Research Collaboration Award
A scholarship is presented to a graduating student for perpetuating multidisciplinary, evidence-base research practices, healthcare communications or information.

Pharmacists Mutual Companies Book Award
A reference text is presented to a student who has demonstrated outstanding performance.

Pharmacists Mutual Companies Scholarship
This scholarship is presented to a student who has a desire to be a community practitioner and has demonstrated academic achievement and financial need.

Polish American Pharmacist’s Association-Joseph Koslow Memorial Book Award
A scholarship is presented each year to an outstanding PS-II student with a knowledge of and an appreciation for the culture and history of Poland and Eastern Europe.

Shopko Stores, Inc. Scholarship
A monetary award is presented to one student who has a desire to pursue a career in community pharmacy and has demonstrated financial need.

Target Pharmacy Case Study Scholarship
Scholarships are awarded to the winning team of students who participated in the Target Pharmacy Case Study Competition.

Teva Pharmaceuticals USA Outstanding Student Award
A plaque and monetary award are presented to a graduating student who excels in the study of pharmacy.

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. This scholarship is renewable for the first three years.

Walgreens Diversity and Inclusion Excellence Award
This scholarship is awarded to a student who embraces diversity and promotes diversity and inclusive initiatives on campus.

Walgreens 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
Scholarships are given to PS-III students with high scholastic standing, strong leadership qualities, and an interest in entering community pharmacy practice.
FACULTY LIST FOR PHARMACEUTICAL SCIENCES
Shridhar V. Andurkar, Ph.D.
Auburn University
School of Pharmacy
Chair and Associate Professor

Shaifali Bhalla, Ph.D.
University of Illinois at Chicago
College of Pharmacy
Associate Professor

Robert L. Chapman, Ph.D.
The Ohio State University
College of Pharmacy
Associate Professor

Annette Gilchrist, Ph.D.
University of Connecticut
The Graduate School
Assistant Professor

Anil Gulati, M.D., Ph.D., FCP
Erasmus University Rotterdam
Erasmus Medical Center Department of Pharmacology and Therapeutics
Associate Dean for Research and Professor

Medha D. Joshi, Ph.D.
University of Mumbai
Institute of Chemical Technology
Assistant Professor

Elizabeth M. Langan, M.D.
Case Western Reserve University
School of Medicine
Adjunct Instructor

Karen M. Nagel-Edwards, Ph.D.
Purdue University
School of Pharmacy and Pharmaceutical Sciences
Associate Professor

Natarajan Venkatesan, Ph.D.
Dr. Hari Singh Gour University
Department of Pharmaceutical Sciences
Assistant Professor

Robin M. Zavod, Ph.D.
University of Kansas
College of Pharmacy
Associate Professor

FACULTY LIST FOR PHARMACY PRACTICE
Regina Arellano, Pharm.D., BCPS
University of Illinois at Chicago
College of Pharmacy
Assistant Professor

Sally Arif, Pharm.D., BCPS
University of Kansas
College of Pharmacy
Assistant Professor

Jill S. Borchert, Pharm.D., BCPS, FCCP
University of Michigan
College of Pharmacy
Vice Chair, Postgraduate Year One Residency Program
Director and Professor

Susan Cornell, Pharm.D., CDE, FAPhA, FAADE
Midwestern University
Chicago College of Pharmacy
Assistant Director of Experiential Education and Adjunct Associate Professor

Brian T. Cryder, Pharm.D., BCACP, CACP
Ohio Northern University
College of Pharmacy
Associate Professor

Lea E. dela Peña, Pharm.D., BCPS
University of Illinois at Chicago
College of Pharmacy
Associate Professor

Jennifer J. D’Souza, Pharm.D., CDE, BC-ADM
Midwestern University
Chicago College of Pharmacy
Associate Professor

Margaret A. Felczak, Pharm.D., BCPS
University of Illinois at Chicago
College of Pharmacy
Assistant Professor

Nancy Fjortoft, Ph.D.
University of Illinois at Chicago
College of Education
Dean and Professor

Julie A. Fusco, Pharm.D., CGP, BCPS
University of Illinois at Chicago
College of Pharmacy
Associate Professor

Jacob P. Gettig, Pharm.D., MPH, BCPS
Purdue University
School of Pharmacy and Pharmaceutical Sciences
Assistant Dean for Postgraduate Education and Associate Professor
Christine Schumacher, Pharm.D., BCPS, CDE, BC-ADM
University of Michigan
College of Pharmacy
Assistant Professor

Carrie A. Sincak, Pharm.D., BCPS, FASHP
University of Illinois at Chicago
College of Pharmacy
Vice Chair and Professor

Avery Spunt, M.Ed., FASHP
University of Illinois at Chicago
College of Pharmacy
Associate Dean of Clinical Affairs, Director of
Experiential Education and Adjunct Professor

Sheri L. Stensland, Pharm.D., AE-C, FAPhA
Midwestern University
Chicago College of Pharmacy
Associate Professor

Timothy J. Todd, Pharm.D.
Midwestern University
Chicago College of Pharmacy
Associate Professor

Kathleen M. Vest, Pharm.D., CDE, BCACP
Albany College of Pharmacy
Associate Professor

Sheila K. Wang, Pharm.D., BCPS, AQ-ID
The Ohio State University
College of Pharmacy
Postgraduate Year Two Infectious Disease Residency
Program Director and Associate Professor

Katie Wdowiarz, Pharm.D., BCPS
University of Maryland
School of Pharmacy
Assistant Professor

Jeffrey T. Wieczorkiewicz, Pharm.D., BCPS
Midwestern University
Chicago College of Pharmacy
Assistant Professor

Susan R. Winkler, Pharm.D., BCPS, FCCP
University of Illinois at Chicago
College of Pharmacy
Chair, Postgraduate Year One Community Pharmacy
Residency Program Coordinator and Professor

Elizabeth Zdyb, Pharm.D., BCPS
Creighton University
School of Pharmacy and Health Professions
Assistant Professor
MISSION
The College of Health Sciences 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 the College of Health Sciences (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 handbooks and 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, 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, administrative probation, 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 four faculty members from the basic science departments (2 representatives from each campus). The Dean of Students and the CHS Dean or his/her designee are ex-officio members without vote. The CHS Dean appoints the co-chairs, one from each campus, of this committee. Each campus has a subcommittee of at least three members of the CHS Student Promotion and Graduation Committee and is chaired by the co-chair from each respective campus.

At the end of each academic year, each subcommittee 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 subcommittees meet each spring and fall, or as needed, to recommend for graduation all students who have satisfactorily completed all degree requirements specified by their program/school. The subcommittee’s recommendations are forwarded to the CHS Dean and the University Faculty Senate for approval. These campus-based subcommittees also review student appeals of Student Academic Review Committee recommendations from their respective campus. The co-chairpersons of the committee are responsible for submitting minutes of each meeting to the CHS Dean.

**Satisfactory Academic Progress**

To achieve satisfactory academic progress, a student enrolled in a graduate degree program in the College of Health Sciences must pass all 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 2.75 or higher. The following programs have exceptions to the minimum 2.75 GPA requirement and/or additional criteria for satisfactory academic progress.

*Arizona School of Podiatric Medicine (AZPod):* A student enrolled in Arizona School of Podiatric Medicine must pass all courses and maintain a cumulative grade point average of 2.00 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 3.00 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 Program:* A student enrolled in the Nurse Anesthesia Program must pass all courses and maintain a cumulative grade point average of 2.75 or higher to have achieved satisfactory academic progress. In addition, a student must achieve a "B-" or higher in all NAAP curriculum courses. NAAP courses include: 570, 580, 540, 540L, 551, 581, 541, 541L, 552, 560, 582, 542, 542L, 553, 571, 583, and all clinical rotation and clinical didactic component courses.

*Physician Assistant Program:* A student enrolled in the Physician Assistant Program must pass all courses and maintain a cumulative grade point average of 2.75 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.

*Speech-Language Pathology (SLP) Program:* A student enrolled in the Speech-Language Pathology Program must pass all courses and maintain a cumulative grade point average of 3.00 or higher to have achieved satisfactory academic progress.
## Academic Progress

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Usual Action ¹</th>
<th>Transcript Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory professional behavior; no course failures; and cumulative GPA $\geq$ 3.00 (CP, DHS, SLP) or $\geq$ 2.75 (graduate programs) or $\geq$ 2.00 (AZPod)</td>
<td>Allowed to progress to the next quarter</td>
<td>---</td>
</tr>
<tr>
<td>Satisfactory professional behavior; no course failures; and one quarter of cumulative GPA &lt; 3.00 (CP, DHS, SLP) or &lt; 2.75 (graduate programs) or &lt; 2.00 (AZPod)</td>
<td>Academic warning for the subsequent quarter</td>
<td>Academic warning is not noted on the transcript.</td>
</tr>
<tr>
<td>Satisfactory professional behavior; one course failure; and/or two quarters of cumulative GPA &lt; 3.00 (CP, DHS, SLP) or &lt; 2.75 (graduate programs) or &lt; 2.00 (AZPod)</td>
<td>Academic probation for the subsequent quarter. 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) Administrative probation</td>
<td>&quot;F&quot; 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 &quot;F&quot; grade remains on the transcript as an &quot;F&quot; but is no longer factored into the GPA calculation. The new grade will be factored into the GPA. Academic probation is not noted on transcript. Academic leave of absence and administrative probation are noted on transcript.</td>
</tr>
<tr>
<td>Satisfactory professional behavior; one course failure; and/or one or more quarters of cumulative GPA &lt; 3.00, and/or failure to meet any other established program academic requirements.</td>
<td>Extended program (Clinical Psychology-AZ) Note: 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.</td>
<td>---</td>
</tr>
<tr>
<td>Satisfactory professional behavior; two course failures; and/or three quarters of cumulative GPA &lt; 3.00 (CP, DHS, SLP) or &lt; 2.75 (graduate programs) or &lt; 2.00 (AZPod)</td>
<td>a) Academic leave of absence ² and academic probation, or b) Administrative probation and academic probation, or c) Dismissal Note: Two or more course failures will typically result in dismissal.</td>
<td>Academic leave of absence, administrative probation, and dismissal are noted on transcript.</td>
</tr>
</tbody>
</table>

¹ May be modified by the Student Academic Review Committee or the CHS Student Promotion and Graduation Committee.

² WF may be considered as a course failure by a Student Academic Review Committee.

³ 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, administrative probation, academic leave of absence, or is dismissed. Each Student Academic Review Committee reserves the right to modify its usual actions if there are extenuating circumstances.

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.

---

106
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.

Within two working days following the committee meeting, the chair of the Program 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. 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 when a student earns a cumulative GPA below the minimum GPA required by their program/school for one quarter and/or 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 in 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 their 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, which, if continued, will necessitate an academic leave of absence, administrative probation, or dismissal from the program/school and the College. 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 remediated 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.

**Administrative Probation**

Administrative probation may occur when a student is not allowed to progress in the standard program curriculum due to course failures and/or failure to maintain the required cumulative GPA for two or more quarters. When students are placed on administrative probation by the Student Academic Review Committee, they 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.

Administrative probation is noted on the student’s transcript. Administrative probation/leave of absence will be noted on the transcript for periods of non-enrollment during the administrative probation 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 deficient 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.
Extended Program (for Clinical Psychology Program-Glendale)

For various academic or non-academic reasons, a restructuring of a student’s academic course load may be necessary. Accordingly, an individual’s academic course load may be reduced so that the student enters an extended program. Such a program rearranges the course schedule so that the normal time period for the program is extended, usually by an additional year. A student is placed on an extended program by the Academic Review Committee.

If the extended program was established for academic reasons (course failure, a cumulative GPA less than 3.00 for one or more quarters, or failure to meet any other established program academic requirements), a student may return to good standing while on an extended program, as long as the student raises his/her GPA and does not fail any additional courses. If a student is placed on an extended program, such action does not modify or limit the actions of either the Program/School Student Academic Review Committee or the CHS Student Promotion and Graduation Committee. Thus, the student may be placed on an academic leave of absence or dismissed while on an extended program.

It is the responsibility of the chair of the Program/School Student Academic Review Committee to notify the CHS Dean and all academic support areas affected by this status change (eg., Registrar, Office of Student Financial Services, Office of Student Services, etc.) whenever an extended program has been adopted and approved by the committee.

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 or she possesses the aptitude to 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 usually 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” 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 student may earn any grade in the repeated course and the new grade will be factored into the overall GPA.

Under exceptional circumstances, such as academic probation or administrative probation, a student may retake a Midwestern University course in which they have received a “C.” The Program/School Director and the CHS Dean must approve this retake option. Typically, a maximum of three “C” courses 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.

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

All requests for advanced standing by newly admitted or transfer students are processed on a course-by-course basis by the program/school’s Admissions 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 Admissions Committee will share the submitted course materials with the appropriate basic science department (if applicable) to determine if the course(s) is an appropriate substitute. All requests must be submitted at matriculation. Each program/school determines the minimum letter grade of coursework for advanced standing. Typically, advanced standing will only be considered for coursework in which a letter grade of “C” or better has been earned. A “C-” letter grade is not acceptable for advanced
standing consideration. Some programs/schools may have additional requirements. If the Admissions Committee denies the request for advanced standing, the student may appeal this decision to the CHS Dean.

**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 appropriate campus co-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.
2. Material, documentable information not available to the committee at the time of its initial decision.
3. Procedural error.

The CHS Student Promotion and Graduation campus subcommittees will review student appeals from their respective campus. A majority of faculty members on each subcommittee must be from outside the program/school from which the student is appealing. One member of the appeal subcommittee must be from the student’s program/school and is a non-voting member. The subcommittee 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 co-chair of the subcommittee 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 subcommittee (in person or via telephone) to present his/her case. In such instances, the student shall inform the co-chair of the subcommittee, in writing (i.e., e-mail or hand-delivery), of his/her desire to appear before the subcommittee or his/her intent to waive this right. If the student chooses to appear before the subcommittee, this prerogative extends to the involved student only and not to any other individuals. After review of the appeal, the subcommittee co-chair submits the committee’s recommendation to the Dean and notifies the chair of the Student Academic Review Committee. The Student Academic Review Committee may also appeal the recommendation of the CHS Student Promotion and Graduation Subcommittee to the CHS Dean. The appeal must be submitted within three working days after notification of the CHS Student Promotion and Graduation Committee’s recommendation. Upon receipt of the Student Promotion and Graduation Subcommittee’s recommendation, the Dean makes the final decision, typically within ten working days, and then notifies the student, the chairs of the Student Academic Review Committee and the CHS Student Promotion and Graduation Subcommittee, and all appropriate support offices.

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 completed all academic requirements for the preceding year of the professional program/school curriculum.

**Course Credit**

Course credits are generally determined according to the following formula: one credit is assigned to a course for 2-4 lab weeks. Typically, one credit is given for each week of clinical rotations.

**Course Prerequisites**

Prerequisites for courses may be established by the program/school or department that administers the course. Prerequisites are recommended to the CHS Curriculum Committee for approval and are listed with the course description in the Midwestern University Catalog. On a case-by-case basis, prerequisites may be waived upon approval by the chair of the department or director of the program/school that delivers the course.

**Faculty Mentor Program**

Most CHS academic programs assign a faculty mentor to students in each entering class. The faculty mentor assists with academic and non-academic problems. In addition to these faculty mentors, the CHS Dean, Assistant Deans, and
the Dean of Students are also available to assist students with academic advising, counseling, and non-academic problems. The faculty members volunteer their time and their effort to the success of this program. It is, however, the student who determines the amount of interaction.

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.
Grades
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 for all students admitted in Summer Quarter 2008 or thereafter. For students who matriculated prior to or in Summer or Fall Quarter 2007, refer to the 2007-2008 Midwestern University Catalog for the relevant grading system.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent (%)</th>
<th>Quality Points (per credit)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
<td>4.000</td>
<td>-</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td>3.670</td>
<td>-</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>3.330</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
<td>3.000</td>
<td>-</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
<td>2.670</td>
<td>-</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
<td>2.330</td>
<td>-</td>
</tr>
<tr>
<td>C</td>
<td>70-76</td>
<td>2.000</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 70</td>
<td>0.000</td>
<td>-</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>0.000</td>
<td>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 &quot;I&quot; 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.</td>
</tr>
<tr>
<td>IP</td>
<td>-</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>P</td>
<td>-</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>F</td>
<td>-</td>
<td>0.000</td>
<td>Fail (for a pass/fail course); designation indicates that the student has not made satisfactory progress or completed required coursework satisfactorily. Grade of &quot;F&quot; is counted toward credit hour accruals as attempted but not completed. Grade of &quot;F&quot; is calculated into the GPA (quality points are lowered due to unsuccessful course completion).</td>
</tr>
<tr>
<td>W</td>
<td>-</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>WF</td>
<td>-</td>
<td>0.000</td>
<td>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 can be grounds for dismissal.</td>
</tr>
<tr>
<td>AU</td>
<td>-</td>
<td>0.000</td>
<td>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.</td>
</tr>
<tr>
<td>AP</td>
<td>-</td>
<td>0.000</td>
<td>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.</td>
</tr>
</tbody>
</table>
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 beginning at the end of the first quarter of enrollment and does not include any grades or credits for courses audited or accepted for advanced standing or for courses with a grade of withdrawal (W), withdrawal failing (WF), pass (P) or fail (F) that were repeated. 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 grade remains on the transcript but only the new grade is used in the computation of the GPA.

Graduation
The degrees of Master of Biomedical Sciences, Master of Arts in Biomedical Sciences, Master of Occupational Therapy, Master of Medical Science in Physician Assistant Studies, Master of Science in Cardiovascular Science, Master of Science in Nurse Anesthesia, Master of Science in Speech-Language Pathology, Master of Arts in Clinical Psychology, Doctor of Psychology in Clinical Psychology, Doctor of Physical Therapy, Doctor of Health Science, or Doctor of Podiatric Medicine will be conferred upon candidates who have completed all academic requirements, satisfied all financial obligations, and completed all graduation requirements.

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. Full-time students enrolled in a program without a clinical component are required to have all immunizations, but are not required to have titers. Part-time students enrolled in a program without a clinical component are not required to have immunizations or titers.

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.

Students requesting a voluntary leave of absence must comply with the following:

1. Make an appointment with the appropriate Program/School Director and representative from the Dean’s Office to discuss the leave of absence;
2. A student must provide written notification and documentation, if applicable, to the Dean stating the reason for the leave of absence from MWU.

For mandatory leaves of absence, students 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.

All leaves of absence are granted for specific periods of time and require that the student submit written notification of an intention to return prior to the end of the leave period. 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. 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. Please refer to the Midwestern University Catalog Academic Policies section for a complete description of the Leave of Absence Policy.

Professional Conduct
Students are expected to emulate the legal, moral, and ethical standards expected of professionals in their respective areas 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, disciplinary probation, disciplinary suspension, or disciplinary dismissal. Disciplinary warning and disciplinary probation are not noted on the transcript but are kept in the student’s disciplinary file. Disciplinary suspension and disciplinary dismissal 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
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 with the Office of the Dean to discuss the process.
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 and mean Program scores 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 2020. 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.

**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 more than 1,500 applications received each year for 86 seats. The application deadline is October 1, 2014, 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 September 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 2.75 on a 4.00 scale. Competitive applicants typically have science and overall GPA of at least 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, 2010.
   - Test scores must be received by the Office of Admissions no later than December 1, 2014. Scores must be sent directly from ETS to the MWU Office of Admissions.
   - Applicants are expected to 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.
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 Course**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Biology with lab</td>
<td>4 Sem/6 Qtr hours</td>
</tr>
<tr>
<td>*Anatomy</td>
<td>4 Sem/6 Qtr hours</td>
</tr>
<tr>
<td>*General Chemistry with lab</td>
<td>8 Sem/12 Qtr hours</td>
</tr>
<tr>
<td>*Organic Chemistry with lab</td>
<td>4 Sem/6 Qtr hours</td>
</tr>
<tr>
<td>Math (college algebra or above)</td>
<td>3 Sem/4 Qtr hours</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 Sem/4 Qtr hours</td>
</tr>
<tr>
<td>English Composition</td>
<td>6 Sem/9 Qtr hours</td>
</tr>
<tr>
<td>Social and Behavioral Sciences (Sociology, Psychology, or Anthropology, etc.)</td>
<td>6 Sem/9 Qtr hours</td>
</tr>
</tbody>
</table>

*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.

**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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

**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 by October 1, 2014. 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). 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 prehealth advisory committee. The second letter may be written by any one of the following: a prehealth advisory committee, a prehealth 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 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, 2010 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, 2014.

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 2.75. 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

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 September 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.

A typical day on campus involves participation in the following activities, which are coordinated by the Office of Admissions: a presentation by the PA Program Director, interaction with current MWU PA students, observation of a PA Program course lecture, presentations by admissions counselors and financial aid office representatives, and a walking tour of the campus. In addition, the day will include a writing exercise that will be evaluated by the PA Admissions Committee and a small group interview session facilitated by PA faculty members. During each interview session prospective students may be asked about their academic, personal, and professional aspirations and preparedness for admission to the Program. Interviewed applicants are assessed using a standardized evaluation tool, which is included with the applicants’ files and forwarded to the PA Admissions Committee for review.

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.
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.

Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean and Program Director, will identify and discuss what accommodations, if any, the College (Program) would need to make that would allow the candidate to complete the curriculum. The College (Program) 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.

**Matriculation Process**

The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

**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’s 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 2.75 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

CURRICULUM
The MWU CHS Physician Assistant Program reserves the right to alter its curriculum however and whenever it deems appropriate.

First Professional Year:
Total Quarter Credit Hours Required: 78

Summer Quarter
ANAT 1500 Human Gross Anatomy and Embryology 7
BIOC 0551 Human Biochemistry 3
BIOC 0552 Clinical Biochemistry and Nutrition 3
PASS 0501 Clinical Medicine I 4
PASS 0511 Professional Seminar I 1
PASS 0539 Biopsychosocial Issues 2
Total 20

Fall Quarter
ANAT 0565 Human Neurosciences 4

CORE 1599 Interprofessional Education I 1
PASS 0502 Clinical Medicine II 4
PASS 0564 Physical Diagnosis 3
PHAR 0584 Pharmacology I 3
PHYS 1510 Human Physiology I 3.5
Total 18.5

Winter Quarter
MICR 1576 Immunology 2
PASS 0503 Clinical Medicine III 6
PASS 0527 Research Seminar 4
PASS 0541 Psychiatric Principles 2
PHAR 0585 Pharmacology II 3
PHYS 1511 Human Physiology II 3.5
Total 20.5

Spring Quarter
BIOC 0581 Human Genetics 1
MICR 0582 Infectious Diseases 4
PASS 0504 Clinical Medicine IV 6
PASS 0512 Professional Seminar II 2
PASS 0521 Introduction to Capstone Project 1
PASS 0528 Advanced Patient Assessment and Management 2
PHAR 0586 Pharmacology III 3
Total 19

Second Professional Year:
Total Quarter Credit Hours Required: 55.5

Summer Quarter
PASS 0641-0648 Core Clinical Rotations 12
PASS 0681 Advanced Clinical Medicine I 3
Total 15

Fall Quarter
PASS 0641-0648 Core Clinical Rotations 12
PASS 0671 Independent Study in Capstone Project I 0.5
Total 12.5

119
### Winter Quarter

- PASS 0641-0648 | Core Clinical Rotations | 12
- PASS 0672 | Independent Study in Capstone Project II | 0.5
- PASS 0682 | Advanced Clinical Medicine II | 3
- **Total** | | **15.5**

### Spring Quarter

- PASS 0641-0648 | Core Clinical Rotations | 12
- PASS 0673 | Independent Study in Capstone Project III | 0.5
- **Total** | | **12.5**

### Third Professional Year:

**Total Quarter Credit Hours Required:** 12.5

### Summer Quarter

- PASS 0749 | Elective I Rotation | 4
- PASS 0750 | Elective II Rotation | 4
- PASS 0774 | Independent Study in Capstone Project IV | 0.5
- PASS 0783 | Advanced Clinical Medicine III | 4
- **Total** | | **12.5**

### Required Core and Elective Clinical Rotations

- PASS 0641 | Internal Medicine Rotation | 6
- PASS 0642 | Behavioral Medicine Rotation | 6
- PASS 0643 | General Surgery Rotation | 6
- PASS 0644 | Emergency Medicine Rotation | 6
- PASS 0645 | Family Medicine Rotation | 6
- PASS 0646 | Geriatric Medicine Rotation | 6
- PASS 0647 | Women’s Health Rotation | 6
- PASS 0648 | Pediatric Medicine Rotation | 6
- PASS 0749 | Elective I Rotation | 4
- PASS 0750 | Elective II Rotation | 4
- **Total** | | **56**

### COURSE DESCRIPTIONS

**ANAT 0565 Human Neurosciences**
This is an integrated, interdisciplinary course in which students learn to identify and describe the basic structural 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 Physician Assistant Program.

4 credits

**ANAT 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

**BIOC 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

**BIOC 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

**BIOC 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

**CORE 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

**MICR 0582 Infectious Diseases**
This didactic course covers infectious diseases, their etiologic agents, differential diagnoses and disease management. Through the use of patient cases, diagnostic algorithms and integrative self-studies, students learn problem-solving skills. The course includes hands-on experiential laboratory sessions and laboratory-based patient cases 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

**MICR 1576 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

**PASS 0501 Clinical Medicine I**
Medical interviewing skills will be introduced through formal lectures and developed through small case groups and patient interviews. The skills, knowledge, and sensitivity needed to communicate and intervene effectively in a variety of psychosocial situations are presented. Communication and improving patient rapport will also be discussed in relationship to the various life cycles. 
4 credits

**PASS 0502 Clinical Medicine II**
A systems-oriented approach will introduce common diseases and syndromes, their underlying pathophysiology (including signs and symptoms), patient evaluation (historical, 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 problem-based learning techniques will be utilized. 
4 credits

**PASS 0503 Clinical Medicine III**
A systems-oriented approach will introduce common diseases and syndromes, their underlying pathophysiology (including signs and symptoms), 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, case group discussions, and problem-based learning techniques will all be utilized. 
6 credits

**PASS 0504 Clinical Medicine IV**
A systems-oriented approach will introduce common diseases and syndromes, their underlying pathophysiology (including signs and symptoms), 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, case group discussions, and problem-based learning techniques will all be utilized. 
6 credits

**PASS 0511 Professional Seminar I**
This course presents and discusses the clinical practice, role, and responsibilities of physician assistants. Professional behavior, cultural and social awareness, 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

**PASS 0512 Professional Seminar II**
This course traces the evolution of medical concepts, the professional role of the physician assistant, and basic concepts for quality healthcare delivery. Bioethical issues that arise during the provision of healthcare services will also be discussed. In addition, medicolegal aspects of healthcare and preparation for clinical practice will be reviewed. 
2 credits

**PASS 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 complete a comprehensive literature review. This literature review will serve as the foundation for the completion of the other components of the Capstone Project which include evidence-based medicine projects, a patient education project and the design and implementation of a Power Point of the entire Capstone portfolio. 
1 credit

**PASS 0527 Research Seminar**
This course is designed to provide an overview of the scientific method including quantitative and conceptual 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. Both research design and statistical topics will be presented in the context of effective review of the medical literature for the purpose of application to patient populations and medical problems.

4 credits

**PASS 0528 Advanced Patient Assessment and Management**
This course is designed to allow the physician assistant student to obtain the knowledge and skills required to physically assess a patient’s medical and health status as part of the focused adult history and problem-oriented physical examination. In addition, students will 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

**PASS 0539 Biopsychosocial Issues**
The course presents the historical, philosophical, and practical foundations of behavioral medicine. The models of human behavior and mind include Psychodynamic/Psychoanalytic, Behavioral, Developmental/Lifecycle, Cognitive-Behavioral Theories and the Biopsychosocial Model. The student will be introduced to the relationship between physical illness, injury/recovery, and behavioral medicine principles.
2 credits

**PASS 0541 Psychiatric Principles**
This course presents the concepts and practices related to a review of the symptoms, signs, diagnosis and management of psychiatric syndromes and disorders across the lifespan.
2 credits

**PASS 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 problem-based learning will be employed.
3 credits

**PASS 0641 Internal Medicine Rotation**
Six-week clinical rotation in an Internal Medicine setting.
6 credits

**PASS 0642 Behavioral Medicine Rotation**
Six-week clinical rotation in a Behavioral Medicine setting.
6 credits

**PASS 0643 General Surgery Rotation**
Six-week clinical rotation in a General Surgery setting.
6 credits

**PASS 0644 Emergency Medicine Rotation**
Six-week clinical rotation in an Emergency Medicine setting.
6 credits

**PASS 0645 Family Medicine Rotation**
Six-week clinical rotation in a Family Medicine setting.
6 credits

**PASS 0646 Geriatric Medicine Rotation**
Six-week clinical rotation in a Geriatric Medicine setting.
6 credits

**PASS 0647 Women’s Health Rotation**
Six-week clinical rotation in an Obstetrics/Gynecology setting.
6 credits

**PASS 0648 Pediatric Medicine Rotation**
Six-week clinical rotation in a Pediatric Medicine setting.
6 credits

**PASS 0671 Independent Study in Capstone Project I**
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, application of evidence-based medicine techniques, creation of effective patient and community education materials, and a final presentation/dissemination of the materials collected.
0.5 credits

**PASS 0672 Independent Study in Capstone Project II**
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, application of evidence-based medicine techniques, creation of effective patient and community education materials, and a final presentation/dissemination of the materials collected.
0.5 credits

**PASS 0673 Independent Study in Capstone Project III**
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, application of evidence-based medicine techniques, creation of effective patient and community education materials, and a final presentation/dissemination of the materials collected.
0.5 credits
PASS 0681 Advanced Clinical Medicine I
This course is designed to build upon the student’s foundation of clinical medicine knowledge and to prepare him or her 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 for healthcare providers and advance cardiovascular life support, and other 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

PASS 0682 Advanced Clinical Medicine II
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

PASS 0749 Elective I Rotation
Four-week clinical rotation in a discipline of the student’s choosing (subject to approval by the Program). 4 credits

PASS 0750 Elective II Rotation
Four-week clinical rotation in a discipline of the student’s choosing (subject to approval by the Program). 4 credits

PASS 0774 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, application of evidence-based medicine techniques, creation of effective patient and community education materials, and a final presentation/dissemination of the materials collected. 0.5 credits

PASS 0783 Advanced Clinical Medicine III
This course is designed to build upon the student’s foundation of clinical medicine knowledge. Guest lecturers with clinical expertise in a variety of fields will provide advanced information and instruction. In addition, students will receive updates on clinical practice issues. During the course, students will receive an intensive week of lecture topics to help them prepare for the Physician Assistant National Certifying Examination (PANCE). Students will also focus on professional issues in preparation for graduation and clinical practice. 4 credits

PHAR 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, chemotheraphy 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

PHYS 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

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
Melissa Chung, M.M.S, PA-C
Midwestern University
College of Health Sciences
Instructor

James F. Gunn, M.M.S., PA-C
Midwestern University
College of Health Sciences
Assistant Professor

Patricia Higgins, D.O.
Midwestern University
Chicago College of Osteopathic Medicine
Assistant Professor

Christine S. Holland, M.M.S, PA-C
Midwestern University
College of Health Sciences
Instructor
David A. Luce, M.M.S., PA-C  
Midwestern University  
College of Health Sciences  
Clinical Coordinator and Associate Professor  

Kristy L. Luciano, M.S., PA-C  
Midwestern University  
College of Health Sciences  
Lecturer  

Sandhya Noronha, M.D.  
University of Illinois at Chicago  
College of Medicine  
Program Director and Associate Professor  

Daniel Provencher, B.M.S., PA-C  
Midwestern University  
College of Health Sciences  
Clinical Coordinator and Lecturer  

Lendell Richardson, M.D.  
Loyola University of Chicago  
Stritch School of Medicine  
Medical Director and Associate Professor  

Kara N. 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
MISSION
The mission of the Midwestern University Physical Therapy Program is to educate students, using the highest standards of education, 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 faculty and students to:

- Promote health and wellness
- Maximize activity and participation of individuals
- Promote and optimize movement and function
- Maintain an ethical framework for practice
- Support professional development of faculty, staff and students
- Integrate and clinically apply current, best basic science, applied science and professional knowledge for making practice decisions
- Engage in scholarly activity
- Embrace cultural and social diversity in the academic community, healthcare community, and community-at-large
- Practice as collaborative members of the healthcare 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; website: www.capteonline.org

Midwestern University is accredited by the Higher Learning Commission/A Commission of the North Central Association of Colleges and Schools (HLC/NCA), 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 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, 2014. 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 science GPA of 2.9 and overall GPA of 3.0 on a 4.00 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, 2010.
   • For more information about the GRE, contact Educational Testing Services (ETS) at 866/473-4373 or visit www.ets.org/gre
5. Completion of a first aid course within the past three years
6. Current certification by the American Heart Association in Basic Life Support (BLS) for Health Care Providers.
7. Demonstration of a people or service orientation through community service or extracurricular activities
8. Motivation for and commitment to healthcare as demonstrated by previous work, volunteer work, or other life experiences
9. Oral and written communication skills necessary to interact with patients and colleagues
10. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy
11. Passage of the Midwestern University criminal background check

Prerequisite Courses

<table>
<thead>
<tr>
<th>Science Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology with lab</td>
<td>4 Semester/6 Quarter hours</td>
</tr>
<tr>
<td>Human/Vertebrate Anatomy with lab</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>Human/Vertebrate Physiology</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>General Chemistry with lab</td>
<td>4 Semester/6 Quarter hours</td>
</tr>
<tr>
<td>General Physics with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Math (college algebra or above)</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>Statistics (should include inferential statistics)</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>English—must include at least one composition course (oral communication/public speaking is recommended)</td>
<td>9 Semester/13 Quarter hours</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences(at least one course in psychology)</td>
<td>9 Semester/13 Quarter hours</td>
</tr>
</tbody>
</table>

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

Application Process and Deadlines

1. PTCAS Application
Applicants are required to submit their applications to PTCAS at http://www.ptcas.org by December 15, 2014. 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 prehealth advisory committee. The second letter can be written by any one of the following: prehealth advisory committee, prehealth 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, 2010) 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 2.9 and overall 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.

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

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 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. For example, the physical therapy program requires a candidate to be able to move at least 50 pounds 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 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
Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean and Program Director, will identify and discuss what accommodations, if any, the College (Program) would need to make that would allow the candidate to complete the curriculum. The College (Program) 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.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

Dual Acceptance Program—University of St. 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. 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 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 nonphysician teaching assistants (NPTAs). 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 Spring of each year for the Physical Therapy Program. To qualify for graduation, students must:

1. Satisfactorily complete all courses with a minimum cumulative grade point average of 2.75;
2. Satisfactorily complete the required minimum of 169 quarter credit hours in the curriculum;
3. Receive a favorable recommendation for doctoral degree conferral from the Physical Therapy Academic Review Committee and the CHS Student Promotion and Graduation Committee;
4. Receive a favorable recommendation for doctoral 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.

CURRICULUM
The total number of required quarter credits is 169. The first academic year of the professional doctoral curriculum includes four quarters consisting of 64 required course credits (quarter hours). The second academic year of the curriculum is composed of four quarters consisting of 55 required course credits, including 520 clock-hours of clinical education. The third academic year of the curriculum is composed of three quarters consisting of 50 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: 169

First Professional Year:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
</tr>
</tbody>
</table>

Summer Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1500</td>
<td>Human Gross Anatomy and Embryology</td>
<td>7</td>
</tr>
<tr>
<td>BIOC 1553</td>
<td>Cell and Tissue Structure and Function</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1503</td>
<td>Clinical Problem Solving I</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1509</td>
<td>Medical Terminology</td>
<td>0.5</td>
</tr>
<tr>
<td>PTHE 1511</td>
<td>Biopsychosocial Issues in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1512</td>
<td>Health Professionalism</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>16.5</td>
</tr>
</tbody>
</table>

Fall Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE 1599</td>
<td>Interprofessional Education I</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 1510</td>
<td>Human Physiology I</td>
<td>3.5</td>
</tr>
<tr>
<td>PTHE 1513</td>
<td>Physical Therapy Roles and Professional Issues I</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1515</td>
<td>Research</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1552</td>
<td>Health Promotion I</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1577</td>
<td>Physical Therapy Evaluation I</td>
<td>4</td>
</tr>
<tr>
<td>PTHE 1582</td>
<td>Kinesiology/Biomechanics I</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18.5</td>
</tr>
</tbody>
</table>

Winter Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1511</td>
<td>Human Physiology II</td>
<td>3.5</td>
</tr>
<tr>
<td>PTHE 1514</td>
<td>Education Principles</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1521</td>
<td>Preparation for Clinical Education I</td>
<td>1.5</td>
</tr>
<tr>
<td>PTHE 1527</td>
<td>Clinical Conditions I</td>
<td>4</td>
</tr>
<tr>
<td>PTHE 1565</td>
<td>Physical Therapy Interventions I</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1584</td>
<td>Kinesiology/Biomechanics II</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Spring Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1532</td>
<td>Human Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1545</td>
<td>Life Span Human Development</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1566</td>
<td>Physical Therapy Interventions II</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1578</td>
<td>Physical Therapy Evaluation II</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>
Second Professional Year:

Total Quarter Credit Hours Required: 55

Summer Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1637</td>
<td>Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1628</td>
<td>Clinical Conditions II</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1633</td>
<td>Applied Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1667</td>
<td>Physical Therapy Interventions III</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1685</td>
<td>Practicum I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Fall Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1601</td>
<td>Cardiopulmonary Evaluation and Treatment</td>
<td>4</td>
</tr>
<tr>
<td>PTHE 1605</td>
<td>Clinical Problem Solving II</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1608</td>
<td>Orthotics</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1638</td>
<td>Physical Agents I</td>
<td>4</td>
</tr>
<tr>
<td>PTHE 1679</td>
<td>Physical Therapy Evaluation III</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Winter Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1622</td>
<td>Preparation for Clinical Education II</td>
<td>1</td>
</tr>
<tr>
<td>PTHE 1639</td>
<td>Physical Agents II</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1651</td>
<td>Management in Physical Therapy Systems</td>
<td>4</td>
</tr>
<tr>
<td>PTHE 1668</td>
<td>Physical Therapy Interventions IV</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Spring Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1607</td>
<td>Scholarship in Physical Therapy</td>
<td>1</td>
</tr>
<tr>
<td>PTHE 1686</td>
<td>Practicum II</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Third Professional Year:

Total Quarter Credit Hours Required: 50

Summer Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1746</td>
<td>Pediatric Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1747</td>
<td>Human Anatomy II</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1750</td>
<td>Topics in Physical Therapy Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Fall Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1752</td>
<td>Applied Management Skills in Physical Therapy Systems</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1769</td>
<td>Physical Therapy Interventions V</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Winter Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1709</td>
<td>Clinical Problem Solving III</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1711</td>
<td>Prosthetics</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1715</td>
<td>Physical Therapy Roles and Professional Issues II</td>
<td>3</td>
</tr>
<tr>
<td>PTHE 1729</td>
<td>Essentials of Pharmacology for Physical Therapists</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1753</td>
<td>Health Promotion II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Spring Quarter

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHE 1706</td>
<td>Scholarly Development in Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1788</td>
<td>Practicum IV</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Elective Options:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 1670</td>
<td>Clinical Nutrition</td>
<td>1</td>
</tr>
<tr>
<td>BISC 0512</td>
<td>Fundamentals of Research</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 1410</td>
<td>Pharmacological Aspects of Drug Abuse</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 1420</td>
<td>Medical Spanish</td>
<td>2</td>
</tr>
<tr>
<td>PTHE 1705</td>
<td>Advanced Physical Therapy Electives</td>
<td>1-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

Prerequisites are listed for those courses with such requirements. When no prerequisite is listed for a course description, it is implied that there is no prerequisite.
ANAT 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

BIOC 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

CORE 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

PHYS 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

PHYS 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

PTHE 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

PTHE 1509 Medical Terminology
This course provides a basic introduction to medical terminology with a focus on body systems. Students complete 13 online 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

PTHE 1511 Biopsychosocial Issues in Healthcare
This course introduces the student to behavioral medicine and the biopsychosocial issues that impact a patient’s health and wellness. Environmental and developmental influences and the biological/sociocultural determinants of behavior are explored. Special patient issues including the health challenges of obesity, substance abuse, interpersonal violence, aging, and issues of sexuality are covered. Emphasis is placed on patient care and the importance of effective practitioner-patient interaction.
3 credits

PTHE 1512 Health Professionalism I
This course provides an introduction to professional behavior, systems and 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, the Illinois Physical Therapy Act, and the Guide to Physical Therapist Practice are discussed. A combination of lecture, discussion, off-campus field experiences, and presentations will be used in the course.
2 credits

PTHE 1513 Physical Therapy Roles and Professional Issues I
This course, the first of three analyzing professionalism within physical therapist practice, emphasizes the roles and responsibilities of the physical therapist as clinician, educator, supervisor, consultant and scholarly writer. Students analyze professional issues such as professional associations, regulatory agencies, professional values, ethics, legal practice, professional development, autonomous practice, direct access, advocacy, legislative processes, and payment for services. This
course uses lecture, discussion, and structured projects.
2 credits

**PTHE 1514 Education Principles**  
This course provides the foundation for systematically designing, implementing and evaluating learning experiences. Topics include educational roles, learning and teaching principles, needs assessment, goal setting, writing objectives, instructional strategies, group facilitation, patient/family education, academic and peer professional teaching, evaluation of teaching and learning and a unit on scholarly writing. This course uses lecture, discussion, structured projects and simulated teaching.
3 credits

**PTHE 1515 Research**  
Physical therapy practice embraces an evidence-based approach. This multidisciplinary course provides students with a basic understanding of the research process from the standpoint of a consumer of research. The core multidisciplinary research course is supplemented with weekly breakout sessions aimed at providing additional research-related material and examples relevant to physical therapy.
3 credits

**PTHE 1521 Preparation for Clinical Education I**  
This course introduces the 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.
1.5 credits

**PTHE 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

**PTHE 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. This course uses lecture, laboratory sessions, and case studies.
3 credits

**PTHE 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. The course includes lecture, laboratory, discussion, and independent study.
3 credits

**PTHE 1552 Health Promotion I**  
This course provides a conceptual framework for health promotion and disease/injury prevention across the life span, and discusses definitions of health promotion and disease/injury prevention; risk and its relation to disease; assessment of risk; interventions to promote health; constraints to health education programming including cultural issues, disability; evaluation of health promotion and disease/injury prevention programs; and the current roles of physical therapists and other health practitioners in health promotion and disease prevention.
2 credits

**PTHE 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. Lecture, laboratory, and clinical visits are included.
2 credits

**PTHE 1566 Physical Therapy Interventions II**  
This course presents physical therapy interventions including isometric, isotonic, isokinetic, eccentric and concentric strengthening activities; active and passive stretching; proprioceptive neuromuscular facilitation (PNF); principles of musculoskeletal treatment and joint mobilization. Selected clinical conditions of the shoulder, elbow, wrist and hand within a physical therapy framework are addressed. This course includes lecture, group discussions, and laboratory sessions.
2 credits
PTHE 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. Lecture and laboratory formats are used.
4 credits

PTHE 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 neurodynamic evaluation. Students select appropriate special tests and examination procedures to identify musculoskeletal diagnoses. A combination of lecture, laboratory, and discussion sessions are used.
4 credits

PTHE 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.
3 credits

PTHE 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

PTHE 1601 Cardiopulmonary Evaluation and Treatment
This course provides students with the knowledge and skill to evaluate and treat clients with cardiopulmonary disorders. The role of the physical therapist in the acute care setting is highlighted and students learn evaluation & intervention techniques in both lecture and laboratory sessions. The level of evidence for various techniques, the effect of exercise on the cardiopulmonary system and contraindications for physical therapy are discussed.
4 credits

PTHE 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

PTHE 1607 Scholarship in Physical Therapy
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

PTHE 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

PTHE 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

PTHE 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

PTHE 1633 Applied Neuroscience
This course is the second of two neuroscience courses. This course provides students with the ability to identify and describe the structural components and corresponding functions of the nervous system and to correlate nervous system lesions with neurological deficits. This course also begins to analyze the traditional and contemporary neurotherapeutic approaches used as the foundation to evaluate and treat patients with neurologic dysfunction. The material is delivered using lecture, laboratory sessions, and case studies.

3 credits

PTHE 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.

4 credits

PTHE 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

PTHE 1651 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. The course uses a combination of lecture, interactive seminar, discussion and student presentations.

4 credits

PTHE 1667 Physical Therapy Interventions III
This course builds on the principles introduced in Physical Therapy Interventions II and applies those principles to the spinal, temporomandibular, pelvic, and lower extremity joints. Clinical conditions affecting these areas of the body will be discussed as they relate to developing physical therapy intervention plans. Additional course content includes manual and mechanical spinal traction, spinal stabilization and ergonomic training as parts of physical therapy intervention. A combination of lecture, laboratory and discussion sessions are in this course.

3 credits

PTHE 1668 Physical Therapy Interventions IV
This is the fourth course in the Physical Therapy Interventions series. Content includes the design and implementation of a complete treatment plan for adults and children with neurological dysfunction. Topics include: use of motor control theory in the development of the treatment plan, implementation of treatment strategies and techniques for the attainment of functional goals, and practice of therapeutic interventions for the improvement of balance, vestibular disorders, posture, gait, and functional activities. Lecture, lab, and problem-based formats will be used.

5 credits

PTHE 1679 Physical Therapy Evaluation III
This is the third course in the Physical Therapy Evaluation series. Content includes examination of impairments, functional limitations, and disabilities in adults and children with neurological dysfunction. Topics include: motor control, muscle performance, reflex integrity, coordination, balance, vestibular system, functional mobility, gait, arousal and cognition, and home assessment. Students will learn how to select, execute, and modify examination procedures in order to complete the neurological evaluation. Lecture and laboratory formats will be used in this course.

3 credits

PTHE 1685 Practicum I
This course is a three-week, full-time, supervised clinical practice in a healthcare environment. Students practice skills in communication, patient evaluation and management, infection control/standard precautions, and patient education.

3 credits

PTHE 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
PTHE 1708 Scholarly Development in Physical Therapy
Students develop an evidence-based, publishable quality case report or systematic review. Students meet with their faculty advisor prior to Practicum II and work closely with the advisor writing up the case report or review, with an expectation that preliminary drafts will be submitted to the advisor. After the written report is accepted, projects are presented orally as either a platform or poster presentation.
2 credits

PTHE 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 neurologic dysfunction, in acute care settings, or with complex medical conditions. The course format emphasizes the efficient use of evidence-based practice within the context of clinical physical therapy practice.
3 credits

PTHE 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, individual projects, and readings are used to achieve the course objectives.
2 credits

PTHE 1715 Physical Therapy Roles and Professional Issues II
This is the second in a series of three courses that analyze professionalism within physical therapist practice. The course focuses on the multiple roles, responsibilities and opportunities related to international practice, clinical instruction, delegation to and supervision of physical therapist assistants and physical therapy aides, licensure and regulation, employment and career development, and professional service and social responsibility. This course uses a combination of lecture, debate, and case analysis to analyze the depth and breadth of professional issues.
3 credits

PTHE 1716 Physical Therapy Roles and Professional Issues III
This is the third in a series of three courses that analyze professionalism within physical therapist practice. In this course, students gain practical experience as supervisors and consultants. Students also reflect on and evaluate their efficiency and effectiveness in these roles. Independent study methods are used to achieve the course objectives.
1 credit

PTHE 1729 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. The course format is a combination of lecture, case-based learning and independent study. Weekly quizzes and some discussions are online.
2 credits

PTHE 1746 Pediatric Physical Therapy
This course expands on pediatric physical therapy management and introduces principles of physical therapy practice with infants and children across settings: neonatal intensive care unit (NICU), early intervention (EI), schools, and outpatient rehabilitation facilities. Physical therapy management of children with common pediatric conditions will be introduced. Issues related to IDEA legislation (Parts B and C) will be discussed and applied to patient management plans. Lecture, laboratory experiences, and a case-based project facilitate learning in this course.
2 credits

PTHE 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

PTHE 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

PTHE 1752 Applied Management Skills in Physical Therapy Systems
Students apply principles from PTHE 1651: 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. This course utilizes seminar, discussion, and lecture.

3 credits

**PTHE 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

**PTHE 1769 Physical Therapy Interventions V**
This course continues the focus on the design, implementation, and evaluation of comprehensive treatment plans for adults with neurological dysfunction. Therapeutic management of persons with spinal cord injury, cerebellar dysfunction, progressive neurological disorders, and headache/concussion symptoms is discussed. Application of motor learning principles (practice and feedback) will be considered through a case scenario format. Students will be expected to develop and execute treatments for patients with neurologic dysfunction.

2 credits

**PTHE 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, students will submit one article review to the American Physical Therapy Association (APTA) "Hooked on Evidence" database.

11 credits

**PTHE 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, students will submit one article review to the American Physical Therapy Association (APTA) "Hooked on Evidence" database.

11 credits

**ELECTIVES**

**BIOC 1670 Clinical Nutrition**
Nutritional considerations are important in the prevention and management of many disease processes, and to the determination of overall health. Students will explore recent advances in clinically relevant nutrition through a variety of processes that may include case-based learning, online modules, and critical evaluation of research reports selected from the peer-reviewed biomedical literature. The precise format of the course varies from year to year.

1 credit

**BISC 0512 Fundamentals of Research**
This course introduces the topics of Responsible Conduct of Research and the Good Laboratory Practice (GLP) requirements and regulations of the FDA and EPA. Students also receive training in issues related to research on human subjects and animals, radiation safety, and biosafety.

3 credits

**PHAR 1410 Pharmacological Aspects of Drug Abuse**
This elective is designed to provide the student with an in-depth understanding of the pharmacokinetics and pharmacodynamics of the common drugs of abuse, including alcohol, cocaine, stimulants, hallucinogens, and opioids. Current theories regarding the physiologic basis of drug-seeking behavior and the development of drug dependence are presented. In addition, various social, legal and ethical aspects of the drug abuse problem are considered.

2 credits

**PHAR 1420 Medical Spanish**
This elective provides medical, pharmacy, physician assistant and biomedical sciences students with the Spanish vocabulary necessary to understand and converse in the fields of medicine and healthcare. The course has been designed to enhance communicating with the Latino patient as well as understanding cultural attitudes, which may impact medical care. Listening, comprehension, and conversational skills will be stressed through dialogues and oral presentations. Critical learning skills that students are encouraged to develop are cooperative learning and effective group dynamics.

2 credits

Prerequisites: Two years of high school or college Spanish

**PTHE 1705 Advanced Physical Therapy Electives**
Physical therapy students who have an overall GPA of 3.0 in Spring quarter of the second year may enroll for participation in up to 4 credits of the Advanced Physical Therapy Practice elective. Students may elect to participate in one of the structured courses offered, design and implement an
independent study course with a Physical Therapy Program faculty mentor, or complete 1-4 credits of a research elective with a Physical Therapy Program faculty member.

1-4 credits

Prerequisites: Overall GPA of 3.0 and successful completion of all Physical Therapy Program courses through the spring quarter of the second year.

**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 CPR certification at the basic life support level.

**FACULTY**

**Deborah Anderson, PT, M.S., P.C.S.**
Rosalind Franklin University
College of Health Professions
Co-Director of Clinical Education and Assistant Professor

**Judith Burton Hess, PT, M.S., O.C.S**
Duke University
School of Medicine
Instructor

**Donna J. Cech, PT, D.H.S., P.C.S.**
University of Indianapolis
Krannert School of Physical Therapy
Director and Professor

**Christine Conroy, PT, M.H.S.**
University of Indianapolis
Krannert School of Physical Therapy
Associate Professor

**Christian C. Evans, PT, Ph.D.**
University of Illinois at Chicago
College of Medicine
Associate Professor

**Kathy D. Hall, PT, Ed.D.**
Northern Illinois University
College of Education
Associate Professor

**Timothy A. Hanke, PT, Ph.D.**
University of Connecticut
Department of Kinesiology
Associate Professor

**Janet O. Helminski, PT, Ph.D.**
Northwestern University
Institute for Neuroscience
Department of Neurobiology and Physiology
Professor

**Kent Irwin, PT, M.S., G.C.S.**
University of Illinois at Chicago
College of Applied Health Sciences
Co-Director of Clinical Education and Assistant Professor

**Sandra J. Levi, PT, Ph.D.**
Northwestern University
School of Education and Social Policy
Associate Professor

**Janey Prodoehl, PT, Ph.D.**
University of Illinois at Chicago
College of Applied Health Sciences
Associate Professor

**Kathleen P. O’Hagan, Ph.D.**
Rutgers, The State University of New Jersey
Graduate School-New Brunswick
Chair and Professor, Department of Physiology
MISSION
The Occupational Therapy Program is dedicated to excellence in the education of occupational therapists who will meet the occupational needs of individuals and communities through responsive, compassionate and evidence-based practice.

ACCREDITATION
The Midwestern University Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE’s telephone number c/o AOTA is (301) 652-AOTA and its Web address is www.acoteonline.org. 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/A Commission of the North Central Association of Colleges and Schools (HLC/NCA), 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413.

Program Description
The Occupational Therapy Program offers a curriculum leading to the Master of Occupational Therapy (M.O.T.) degree for qualified students. The full-time, continuous, entry-level master’s 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 Master of Occupational Therapy degree is a continuous, full-time program, extending 27 months from matriculation to graduation. The maximum allotted time for completion of this program is 40.5 months. It is also required that all Level II fieldwork must be completed within 18 months of completion of the didactic portion of the program. The general education, professional training, experience, and personal character development of occupational therapists uniquely prepare them to respond to the needs of individuals who face challenges participating in their daily lives.

The Master of Occupational Therapy Program offers a balanced combination of foundational, clinical, and research coursework designed to foster therapists who are self-directed, thoughtful, and caring professionals. The Program provides students with a balanced complement of coursework. Approximately half of the course credits are obtained from foundational courses in the sciences, occupational therapy theory, and research. The remaining credits focus on courses related to evaluation and interventions appropriate for various client populations (e.g., children, the elderly, etc.), specialized coursework in upper extremity intervention, and many opportunities for experiential (hands-on) learning. The practice courses facilitate students’ application of content related to client evaluation and treatment using community-based and case-based learning opportunities. In addition to such preclinical learning opportunities, the fieldwork program is extensive and rich in the types of experiences offered to students. This strong curricular framework succeeds in preparing graduates who are ready and able to enter the profession of occupational therapy and to make a difference in the world.

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 experience provides the foundation for graduates to identify and contribute to effecting solutions to the major emergent health issues of society and contribute to the academic and clinical education of future practitioners. It also is designed to prepare graduates for leadership and management roles in the profession. The graduate will be prepared to make meaningful, ongoing contributions to society, healthcare, and the profession through leadership activities and collaborative efforts with others in occupational therapy and interdisciplinary education, practice, and research.
Program Objectives

Upon completion of the Master of Occupational Therapy Program, graduates are expected to:

1. Provide evidence-based occupational therapy services in traditional and emerging areas of practice.
2. Meet the occupational needs of individuals and populations through professional advocacy and leadership.
3. Apply therapeutic use of occupations to support engagement in activities that promote health, well-being, and quality of life.
4. Sustain continued professional development through lifelong learning activities, and
5. Uphold the ethical standards, values, and attitudes of the occupational therapy profession in order to sensitively meet the occupational needs of a culturally and socially diverse clientele.

These outcomes are accomplished through:

1. A curriculum model based on intentionally sequenced courses that act as vital links between application, analysis, synthesis, and evaluation of knowledge, skills, and attitudes.
2. Critical application of current research and other forms of best evidence to improve occupational therapy practice and contribute to the body of related knowledge.
3. Sequential implementation of simulated and authentic clinical experiences across the curriculum.
4. Occupation-focused coursework and fieldwork experiences designed to facilitate critical and ethical reasoning, and
5. Opportunities for both individual and group work to develop leadership, team-building, and professional skills, behaviors, and attitudes.

Planned Program Improvements

We will provide at least ten authentic learning opportunities to students across the nine quarters of the Program. Faculty-mentored experiential learning, standardized patients, and fieldwork rotations are positioned across courses through the curriculum. We continually strive to use innovative and evidence-based strategies to provide students with the best professional preparation possible.

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 2.75 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.

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, 2015. 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.
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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Anatomy (^1,2)</td>
<td>3 Sem/4 Qtr hrs</td>
</tr>
<tr>
<td>Physiology (^1)</td>
<td>3 Sem/4 Qtr hrs</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 Sem/4 Qtr hrs</td>
</tr>
<tr>
<td>Human Development (^3)</td>
<td>3 Sem/4 Qtr hrs</td>
</tr>
<tr>
<td>Abnormal Psychology</td>
<td>3 Sem/4 Qtr hrs</td>
</tr>
<tr>
<td>Social and Behavioral Science</td>
<td>3 Sem/4 Qtr hrs</td>
</tr>
</tbody>
</table>

\(^1\)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.

\(^2\)Human Anatomy must be completed successfully within 5 years of admission to the Program. The lab component with cadaver experience is strongly recommended.

\(^3\)The Human Development course requirement refers to at least one course which includes the physical, social, and psychological development throughout the lifespan.

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.

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

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, 2015. 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 August 2014. 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 2.75. 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

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 interviewers, lunch with current Midwestern University 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 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 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. The Occupational Therapy Program requires a candidate to be able to move at least 50 pounds 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 and the consistent,
Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean and Program Director, will identify and discuss what accommodations, if any, the College (Program) would need to make that would allow the candidate to complete the curriculum. The College (Program) 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.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

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 Master 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.

**GRADUATION REQUIREMENTS**

To qualify for graduation, students must:

1. Satisfactorily complete all courses with a minimum cumulative GPA of 2.75 or higher;
2. Satisfactorily complete the required minimum number of 132 credit hours in the curriculum;
3. Receive a favorable recommendation for Master’s degree conferment 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 Master’s degree conferment 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 NBCOT. Most states (including Illinois) require status as an occupational therapist registered (OTR) to become a licensed occupational therapist (OTR/L). Most states require licensure in order to practice. A prior felony conviction may affect a graduate’s ability to sit for the NBCOT Certification Exam or attain state licensure.

**CURRICULUM**

The professional master’s curriculum is composed of 45.5 required course credits (quarter hours) for the first calendar year, 62.5 required course credits for the second calendar year, and 24 required course credits for the third calendar year, for a total of 132 quarter credits. Fieldwork courses are placed in the first, second, and third years of the curriculum and include two Level I experiences and two 12-credit Level II Fieldwork experiences. Moreover, faculty-guided and supervised experiential learning opportunities in the community are pivotal learning experiences during the second year which reinforce and expand students’ mastery of content and skill performance related to occupational therapy evaluation and intervention.

Students’ proficiency in evaluation and intervention, independent decision-making and critical thinking are emphasized during Fieldwork II-A and II-B of the curriculum, which occur during the summer and fall quarters of the third professional year. 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.

The Midwestern University College of Health Sciences Occupational Therapy Program reserves the right to alter its curriculum however and whenever it deems appropriate.

**First Professional Year:**

<table>
<thead>
<tr>
<th>Total Quarter Credit Hours Required:</th>
<th>45.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
<td></td>
</tr>
<tr>
<td>CORE 1599 Interprofessional Education I</td>
<td>1</td>
</tr>
<tr>
<td>OTHE 0505 Psychosocial Conditions</td>
<td>3</td>
</tr>
<tr>
<td>OTHE 0510 OT Foundations</td>
<td>2</td>
</tr>
<tr>
<td>OTHE 0520 Theoretical Constructs I</td>
<td>3</td>
</tr>
<tr>
<td>OTHE 0540 OT Analysis I</td>
<td>2</td>
</tr>
<tr>
<td>OTHE 0541 OT Analysis II</td>
<td>2</td>
</tr>
<tr>
<td>OTHE 0583 Neuroscience I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Winter Quarter</strong></td>
<td></td>
</tr>
<tr>
<td>ANAT 0503 Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>OTHE 0525 Pediatric Conditions</td>
<td>3</td>
</tr>
<tr>
<td>OTHE 0550 Fieldwork Foundations</td>
<td>0.5</td>
</tr>
<tr>
<td>OTHE 0560 Occupational Roles and Participation</td>
<td>3</td>
</tr>
<tr>
<td>OTHE 0584 Neuroscience II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13.5</td>
</tr>
</tbody>
</table>
Spring Quarter
OTHE 0526 Adult Conditions 4
OTHE 0536 Fieldwork I-A 2
OTHE 0561 OT Analysis III 2
OTHE 0581 Kinesiology 3
OTHE 0585 Evaluation and Treatment I: Foundations 5
Total 16

Second Professional Year:
Total Quarter Credit Hours Required: 62.5

Summer Quarter
OTHE 0628 Research I 3
OTHE 0637 OT Group Process 3
OTHE 0641 Orthotics I 2
OTHE 0645 Fieldwork I - Community 0.5
OTHE 0655 Evaluation and Treatment II: Children 5
Total 13.5

Fall Quarter
OTHE 0630 Research II 3
OTHE 0642 Orthotics II 2
OTHE 0652 Upper Extremity Rehabilitation 4
OTHE 0657 Pediatric Practice 3
OTHE 0675 Evaluation and Treatment III: Adult 5
Total 17

Winter Quarter
OTHE 0631 Research III 3
OTHE 0667 Psychosocial Practice 3
OTHE 0678 Administration & Leadership 3
OTHE 0685 Evaluation and Treatment IV: Seniors 5
OTHE 0689 Work Rehabilitation 2
Total 16

Spring Quarter
OTHE 0620 Theoretical Constructs II 3
OTHE 0633 Research IV 3

OTHE 0651 Fieldwork Foundations 1
OTHE 0662 Physical Agents 2
OTHE 0687 Adult Practice 3
OTHE 0694 Health Promotion and Program Development 4

Total 16

Third Professional Year:
Total Quarter Credit Hours Required: 24

Summer Quarter
OTHE 0795 Fieldwork II-A 12
Total 12

Fall Quarter
OTHE 0796 Fieldwork II-B 12
Total 12

COURSE DESCRIPTIONS

ANAT 0503 Human Anatomy
This course provides fundamental knowledge of normal human structure and function. The emerging theme will be the interrelationships between structural design and functional capabilities. During this course, basic components including tissues, muscles, nerves, bones and joints will be covered. The musculoskeletal system in particular will be highlighted in both lecture and laboratory formats. 4 credits

CORE 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

OTHE 0505 Psychosocial Conditions
This course is designed to introduce students to issues pertaining to clients with psychiatric disorders, to techniques used in psychiatry to evaluate and diagnose clients, and finally to present an overview of psychiatric conditions within the Diagnostic and Statistical Manual-IV-TR classification system. Implications for occupational therapy practice are introduced. 3 credits
OTHE 0510 OT Foundations
This is an introductory course that focuses on the foundations and scope of occupational therapy practice. The philosophy of the profession, with its emphasis on occupation and adaptation, will be presented from both historical and current perspectives. The characteristics of the profession, including service delivery models and settings for occupational therapy practice, role delineations and professional ethics will be included.
2 credits

OTHE 0520 Theoretical Constructs I
This course is the first of a two course series that introduces the philosophical assumptions, theories, models of practice, and frames of reference within occupational therapy practice. Applications to one’s life and previous exposure to occupational therapy will be incorporated.
3 credits

OTHE 0525 Pediatric Conditions
This course addresses the risk factors, clinical signs and symptoms, pathogenesis, medical tests and treatments, and differential diagnosis of selected diseases/problems most common to the pediatric population. The impact on function is addressed. Prevention of the diseases/problems is emphasized, and current research in etiology and treatment will be discussed.
3 credits

OTHE 0526 Adult Conditions
This course addresses the risk factors, clinical signs and symptoms, pathogenesis, medical tests and treatments, and differential diagnosis of selected diseases/problems most common to the adult population. The impact on function is addressed. Prevention of the diseases/problems is emphasized, and current research in etiology and treatment will be discussed.
4 credits

OTHE 0536 Fieldwork I-A
Fieldwork experience consisting of guided learning experiences in various healthcare and/or community settings that provides students with direct opportunities to observe and interact with clients engaged in functional living activities that are appropriate for their respective cognitive, psychosocial, and physical stage of development. Observational and therapeutic skills are emphasized.
2 credits

OTHE 0540 OT Analysis I
This introductory course emphasizes the value and use of purposeful activities in occupational therapy. The development of occupational performance skills in work, self-care, and play/leisure is highlighted. Activity analysis, problem solving and teaching processes are emphasized.
2 credits

OTHE 0541 OT Analysis II
This introductory course emphasizes the recognition, assessment, measurement, and description of normal and abnormal movement in static and dynamic activities. The development of skills necessary to accurately measure and assess joint range of motion and muscle strength is emphasized.
2 credits

OTHE 0550 Fieldwork Foundations
This course introduces the student to the clinical education program, including its goals and objectives, the types of clinical education experiences provided, and the expectations for student participation. Students will also begin to focus on increasing self-awareness through reflective exercises to foster development of professional behaviors.
0.5 credits

OTHE 0560 Occupational Roles and Participation
This course provides students with an in-depth inquiry into the essential principle of the profession – occupation – and the ways in which everyday occupation provides meaning, continuity, and perspective to our lives. Occupational engagement, experience, and performance will be addressed, and ways in which occupation contributes to well-being and participation in daily life will be highlighted.
3 credits

OTHE 0561 OT Analysis III
This course emphasizes the use of activities to facilitate independence in functional living including performance in self-care, work, and play/leisure. Selected assessment procedures and therapeutic adaptations are emphasized.
2 credits

OTHE 0581 Kinesiology
Basic biomechanical concepts are addressed in this course and their application to occupational therapy treatment in relation to force analysis and its implications on functional movement and activity. The structure and function of joints, connective tissue and muscle are addressed. Components of normal movement in the trunk and extremities are discussed in relation to static and dynamic movement and activity. The influence of task and pathology on function of the musculoskeletal system is discussed.
3 credits

OTHE 0583 Neuroscience I
This is the first of two courses designed to develop the student’s knowledge base of neuroscience to a level required for clinical practice. Throughout the two courses there will be...
an integration of information about principal structural components, corresponding functions of the nervous system and the impact of neurological dysfunction on human occupation.
3 credits

**OTHE 0584 Neuroscience II**
This course continues to develop the students’ knowledge base of neuroscience to a level required for clinical practice. It provides opportunities to apply neuroscience principles to the evaluation and treatment of occupational performance. Throughout the two neuroscience courses, there is an integration of information about principal structural components, corresponding functions of the nervous system and the impact of neurological dysfunction upon human occupation.
3 credits

**OTHE 0585 Evaluation and Treatment I: Foundations**
This course is an introduction to the occupational therapy process, with learning opportunities designed to develop essential skills required for effective therapeutic intervention. This course emphasizes client-centered approaches to evaluation and intervention with clients throughout the lifespan. Clinical reasoning and critical thinking skill development are emphasized.
5 credits

**OTHE 0620 Theoretical Constructs II**
This course focuses on the synthesis and evaluation of specific models of practice and frames of reference as related to occupational therapy practice and education. Application to fieldwork and experiential learning opportunities will be highlighted.
3 credits

**OTHE 0628 Research I**
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. The process of choosing an area of research focus, developing appropriate questions, and beginning the literature review will be emphasized.
3 credits

**OTHE 0630 Research II**
Self-directed learning is emphasized in the development of beginning research skills for individual and 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

**OTHE 0631 Research III**
Self-directed learning builds upon work completed in prerequisite courses to carry out research studies that evaluate clinical practice and/or service delivery. Institutional review board approval initiates the processes of subject recruitment, data collection, and the initial analysis of results.
3 credits

**OTHE 0633 Research IV**
This is the fourth course in the research course series. Results from the previous coursework are subjected to descriptive or statistical analysis and integrated with current literature in occupational therapy. Projects ultimately relate theory to practice, demonstrate synthesis of advanced knowledge in a practice area, with an outcome of a completed manuscript appropriate for publication in a peer-reviewed journal.
3 credits

**OTHE 0637 OT Group Process**
This course provides students with opportunities to learn basic principles of group process and is presented in a laboratory format. Occupational therapy and group application, conflict resolution, problem solving, working with others, and phases of group development are emphasized.
3 credits

**OTHE 0641 Orthotics I**
This course will introduce the fundamental principles involved in the application of basic orthotic devices within the practice of occupational therapy. Emphasis will be placed on anatomical and biomechanical principles as they pertain to orthotic design and utilization, principles of orthotic selection/application and the fabrication process of three basic orthoses.
2 credits

**OTHE 0642 Orthotics II**
This course emphasizes the design and fabrication of complex orthotic devices and adaptive equipment to enhance an individual’s ability to perform work, self-care, and play/leisure activities. The refinement of psychomotor and reasoning skills are highlighted.
2 credits

**OTHE 0645 Fieldwork I - Community**
Fieldwork experience consisting of guided learning experiences in various community settings that provide students with specific opportunities to observe and interact with individuals for whom the focus is the psychological and social factors that influence engagement in occupation.
Observational, evaluation, and documentation skills are emphasized.
0.5 credits

**OTHE 0651 Fieldwork Foundations**
This course focuses on the clinical education program, including the types of experiences recently provided, and the outcomes of student participation in Fieldwork levels I and II. This course will further develop the student attitudes required for the therapeutic process. Students will also focus on reflective and experiential experiences which foster development of professional behaviors that will impact the clinical experience and their future professional careers.
1 credit

**OTHE 0652 Upper Extremity Rehabilitation**
This course focuses on advanced evaluation and intervention strategies for the remediation of physical limitations that are primarily musculoskeletal in nature. Emphasis will be placed on impairments of the upper extremity and their effect on functional performance.
4 credits

**OTHE 0655 Evaluation and Treatment II: Children**
This course emphasizes the application of selected models of practice and strategies for occupational therapy practice with children who have occupational performance dysfunction related to developmental, neuromotor, psychosocial, or medical disabilities. Therapeutic approaches and clinical skills for working with children and families within the home, community, and clinical settings will be emphasized.
5 credits

**OTHE 0657 Pediatric Practice**
The focus of this course is on the application of occupational therapy evaluation and intervention to practice with children in various settings. Problem-based and case-based methodologies are utilized to facilitate students' ability to generate applications to occupational therapy practice.
3 credits

**OTHE 0662 Physical Agents**
This course addresses the theoretical principles and physiological, neurophysiological and electrophysical changes that occur as a result of the application of selected physical modalities. Course content includes information on pain control theories, wound healing principles and the response of tissue to the application of physical modalities. Therapeutic hydrotherapy, thermotherapy, and electrotherapy, when used as an adjunct to, or in preparation for, therapeutic occupation, is highlighted.
2 credits

**OTHE 0667 Psychosocial Practice**
This course provides an in-depth analysis of the use of occupational therapy in psychosocial settings. Analysis of current models of practice, philosophical and theoretical frameworks, and occupational therapy practice are critiqued. Analytical thought, clinical reasoning, logic, and critical thinking are emphasized.
3 credits

**OTHE 0675 Evaluation and Treatment III: Adult**
This course emphasizes the application of selected models of practice and strategies for occupational therapy practice with adults who have occupational performance dysfunction related to cognitive, perceptual, psychosocial, and neuromotor disabilities. Therapeutic approaches and clinical skills for working with individuals within the home, community, and clinical settings will be emphasized.
5 credits

**OTHE 0678 Administration & Leadership**
Basic administrative skills are emphasized, including strategic planning, business plans, legal issues, fiscal management, reimbursement, organization, and personnel management. These applications will provide the tools for the development of occupational therapy service delivery. Leadership is addressed from organizational and professional perspectives.
3 credits

**OTHE 0685 Evaluation and Treatment IV: Seniors**
This course emphasizes the application of selected models of practice and strategies for occupational therapy practice with older adults who have occupational performance dysfunction related to cognitive, psychosocial, neuromotor, and medical disabilities. Therapeutic approaches and clinical skills for working with individuals within the home, community, and clinical settings will be emphasized.
5 credits

**OTHE 0687 Adult Practice**
The focus of this course is on the application of occupational therapy evaluation and intervention to practice with adults in various settings. Problem-based and case-based methodologies are utilized to facilitate student’s ability to generate applications to occupational therapy practice.
3 credits

**OTHE 0689 Work Rehabilitation**
This course focuses on the application of occupational therapy evaluation and treatment approaches to work rehabilitation. The application of ergonomic principles and functional capacity evaluations to varied work settings is emphasized.
2 credits
OTHE 0694 Health Promotion and Program Development
Using skills from the previous administration course, and developing skills in grant-writing, students work in small groups to develop a realistic model for occupational therapy service provision within an agency or institution, private clinic, or community setting. Emerging and non-traditional areas of practice are emphasized.
4 credits

OTHE 0795 Fieldwork II-A
This three month rotation is comprised of supervised field experience with clients and/or client groups who exhibit a variety of medical conditions, which include physical and/or psychosocial disabilities. This rotation emphasizes the development of disciplined, higher-level critical thinking skills necessary to plan and provide high-quality client care. Students are supervised by registered occupational therapists with a minimum of one year of experience.
12 credits

OTHE 0796 Fieldwork II-B
This three month rotation is comprised of supervised field experience with clients and/or client groups who exhibit a variety of medical conditions, which include physical and/or psychosocial disabilities. This rotation emphasizes the development of disciplined, higher-level critical thinking skills necessary to plan and provide high-quality client care. Students are supervised by registered occupational therapists with a minimum of one year of experience.
12 credits

ELECTIVE COURSE DESCRIPTIONS

OTHE 0800 Independent Study
This course is designed to facilitate scholarly inquiry into a topic related to a specific component of occupational therapy 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

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.

Cardiopulmonary Resuscitation (CPR) Certification
Students are responsible for maintaining CPR certification at the basic level while enrolled in the Program.

FACULTY
Kimberly A. Bryze, Ph.D., OTR
University of Illinois at Chicago
College of Education
Director and Associate Professor

Susan Cahill, Ph.D., OTR
University of Illinois at Chicago
College of Applied Health Sciences
Assistant Professor

Brad Egan, O.T.D., OTR
Creighton University
School of Pharmacy and Health Professions
Assistant Professor

Susanne A. Higgins, M.H.S., OTR
University of Indianapolis
College of Health Sciences
Assistant Professor

Lisa J. Knecht-Sabres, D.H.S., OTR
University of Indianapolis
College of Health Sciences
Associate Professor

Mark Kovic, O.T.D., OTR
University of Illinois at Chicago
College of Applied Health Sciences
Assistant Director and Assistant Professor

Dana M. Lingle, M.H.S., OTR
University of Indianapolis
College of Health Sciences
Assistant Professor

Lisa Mahaffey, M.S., OTR
University of Illinois at Chicago
College of Applied Health Sciences
Assistant Professor

Wanda Mahoney, Ph.D., OTR
Nova Southeastern University
College of Health Care Sciences
Assistant Professor

Katie Polo, M.H.S., OTR
University of Indianapolis
College of Health Sciences
Assistant Professor

Emily Simpson, Ph.D., OTR
University of Illinois at Chicago
College of Applied Health Sciences
Associate Professor

Minetta Wallingford, Dr.O.T., OTR
University of Indianapolis
College of Health Sciences
Academic Fieldwork Coordinator and Assistant Professor
BIOMEDICAL SCIENCES PROGRAM

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 or other health professional program. All students take a total of 45 quarter hour credits: 42 required core credits and 3 elective credits. Core courses include: Biochemistry I & II, Human Anatomy (with lab), Human Physiology I & II, Pathophysiology, Medical Microbiology, Molecular Immunology, Pharmacology I, II & III, Neuroscience and Professional Development. The elective credits, offered in a variety of disciplines, include other biomedical science courses and professional preparation courses e.g. Cardiovascular Pharmacology, Medical Spanish, Fundamentals of Research, etc. 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. Two letters of recommendation (or one committee letter from the applicant’s college or university).

4. Official transcripts from each college or university attended.

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 610/771-7670 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 OR
   - Dental Admissions Test (DAT) scores. Contact the American Dental Association (ADA) at 312/440-2500 or visit 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 OR
   - Optometry Admissions Test (OAT) scores. Contact Optometry Admission Testing Program at 800/232-2159 or www.opted.org.

6. Completion of the typical prerequisite coursework for admission into medical, dental, optometry, veterinary medicine or pharmacy schools, 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem. Hrs.</th>
<th>Qtr. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology with lab</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>General Chemistry with lab</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Organic Chemistry with lab</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Physics</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

Application Process and Deadlines

To be considered for admission into the Master of Arts in Biomedical Sciences Program, applicants must submit the following items to the Office of Admissions:

1. Completed applications
   - The application, forms and instructions are accessible at www.midwestern.edu; click on the IL Biomedical Sciences Program section. For questions about the application or the admissions process, contact the Office of Admissions. Applications must include a nonrefundable, nonwaivable application fee of $50.
2. Letters of recommendation
   - Applicants must submit two signed and sealed letters of recommendation.
3. Applicants must submit official transcripts from all regionally accredited colleges or universities attended.
4. Applicants must submit standardized test scores from GRE, MCAT, DAT, PCAT or OAT.
5. 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 Health Sciences 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 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 certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean and Program Director, will identify and discuss what accommodations, if any, the College (/Program) would need to make that would allow the candidate to complete the curriculum. The College (/Program) 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.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

Transfer Credit
Students may request the transfer of previous graduate coursework taken at another accredited university to this degree program. However, no more than 4 quarter credit hours can be accepted as transfer credit. Policies for course transfers can be found in the Midwestern University College of Health Sciences Catalog section titled Advanced Placement/Exemption from Coursework.

Graduation Requirements
To qualify for graduation, students must:

1. Follow an approved course of study acceptable to the Biomedical Sciences Program Student Academic Review 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 Program Student Academic Review Committee and from this committee, the CHS 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

<table>
<thead>
<tr>
<th>Total Credit Hours Required</th>
<th>45</th>
</tr>
</thead>
</table>

Fall Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 1551</td>
<td>Biochemistry I</td>
<td>3.5</td>
</tr>
<tr>
<td>BISC 0530</td>
<td>Professional Development</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 0584</td>
<td>Pharmacology I</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1510</td>
<td>Human Physiology I</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Elective | 1-3 |

Total | 12-14 |

Winter Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 0503</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOC 1552</td>
<td>Biochemistry II</td>
<td>4.5</td>
</tr>
<tr>
<td>MICR 0599</td>
<td>Molecular Immunology</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 0585</td>
<td>Pharmacology II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1511</td>
<td>Human Physiology II</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Total | 18 |

Spring Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 0520</td>
<td>Human Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>BISC 0580</td>
<td>Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>MICR 0580</td>
<td>Medical Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 0586</td>
<td>Pharmacology III</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective | 1-3 |

Total | 14-16 |
Elective Course Options

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 1447</td>
<td>Nutrition in Preventative Medicine</td>
<td>1</td>
</tr>
<tr>
<td>BISC 0512</td>
<td>Fundamentals of Research</td>
<td>3</td>
</tr>
<tr>
<td>BISC 0526</td>
<td>Research Design and Methodology</td>
<td>3</td>
</tr>
<tr>
<td>BISC 0560,</td>
<td>Research Elective</td>
<td>1-4</td>
</tr>
<tr>
<td>0561, or</td>
<td>each course</td>
<td></td>
</tr>
<tr>
<td>0562</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BISC 0850</td>
<td>Intestinal Bacteria in Health and Disease</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 1420</td>
<td>Medical Spanish</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 1430</td>
<td>Cardiovascular Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>PSCI 1371</td>
<td>Alternative Therapies and Natural Products</td>
<td>3</td>
</tr>
<tr>
<td>PSCI 1376</td>
<td>Development of Newly Approved Drug Therapies</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>Varied</td>
<td></td>
</tr>
</tbody>
</table>

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.

**ANAT 0503 Human Anatomy**
This course provides fundamental knowledge of normal human structure and function. The emerging theme will be the interrelationships between structural design and functional capabilities. During this course, basic components including tissues, muscles, nerves, bones and joints will be covered. The musculoskeletal system in particular will be highlighted in both lecture and laboratory formats.
4 credits

**ANAT 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

**BIOC 1551 Biochemistry I**
This course combines lectures and small group discussions of clinical case studies in workshops. Lectures address structure-function relationships in major biomolecules, human metabolism and cell biology. Workshops feature clinical case studies to illustrate principles of clinical biochemistry and application to the practice of pharmacy. Workshop topics may include anemias, cytochrome p450 enzymes, dangers of dietary supplements, diabetes mellitus, drug biomembrane transport, environmental toxins and hemostasis disorders.
3.5 credits

**BIOC 1552 Biochemistry II**
This course combines lectures and small group discussions of clinical case studies in workshops. Lectures address principles of human gene expression, chromosomal abnormalities, pharmacogenomics, multifactorial inheritance, and nutrition. Workshops feature clinical case studies to illustrate principles of clinical biochemistry and application to the principles of pharmacy.
4.5 credits
Prerequisites: BIOC 1551 Biochemistry I

**BISC 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, writing cover letters/personal statements, preparing posters and oral presentations, writing scientific manuscripts, and grant writing.
1 credit

**BISC 0580 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

**MICR 0580 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.
3 credits

**MICR 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

**PHAR 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. This course also includes discussions of environmental toxic agents and antidotes.

3 credits each

**PHYS 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 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, digestive, endocrine and reproductive systems.

3.5 credits each course

**ELECTIVES**

**BIOC 1447 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

**BISC 0512 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

**BISC 0520 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

**BISC 0526 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. This is the foundational course for the Master’s Project.

3 credits

**BISC 0560, 0561, or 0562 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.

1-4 credits each course

Prerequisites: BISC 0512 Fundamentals of Research; Approval of the course director.

**BISC 0644 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 hour lab exercise (hands-on experience with compound, fluorescence, and confocal microscopes, as well as computer programs for image analysis).

2 credits

Prerequisites: Biochemistry I (BIOC 1551) and Fundamentals of Research (BISC 0512) or prior course director approval.

**BISC 0645 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: Biochemistry I (BIOC 1551) or equivalent.
**BISC 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

Prerequisites: PHYS 1510 Human Physiology I; PHYS 1511 Human Physiology II; BIOC 1551 Biochemistry I; BIOC 1552 Biochemistry II

**PHAR 1410 Pharmacological Aspects of Drug Abuse**

This elective is designed to provide the student with an in-depth understanding of the pharmacokinetics and pharmacodynamics of the common drugs of abuse, including alcohol, cocaine, stimulants, hallucinogens, and opioids. Current theories regarding the physiologic basis of drug-seeking behavior and the development of drug dependence are presented. In addition, various social, legal and ethical aspects of the drug abuse problem are considered.

2 credits

**PHAR 1420 Medical Spanish**

The elective provides medical, pharmacy, physician assistant and biomedical sciences students with the Spanish vocabulary necessary to understand and converse in the fields of medicine and healthcare. The course has been designed to enhance communicating with the Latino patient as well as understanding cultural attitudes, which may impact medical care. Listening, comprehension, and conversational skills will be stressed through dialogues and oral presentations. Critical learning skills that students are encouraged to develop are cooperative learning and effective group dynamics.

2 credits

Prerequisites: Two years of high school Spanish or college Spanish

**PHAR 1430 Cardiovascular Pharmacology**

Cardiovascular (CV) disease is a national health problem of major consequence. Its treatment is one of the principal problems facing modern medicine. This elective is designed to familiarize the student with the most significant of all CV diseases, atherosclerosis; and potential anti-atherosclerotic effectiveness and mechanisms of various CV drugs and non-drug forms of therapy.

2 credits

Prerequisites: PHAR 0584, 0585 Pharmacology I, II or PHAR 1641, 1642 Pharmacology I, II

---

**PSCI 1371 Alternative Therapies and Natural Products**

Alternative therapies are being used by a growing percentage of the population and are becoming more visible to mainstream medical practice. Healthcare professionals should develop the knowledge and skills necessary to aid the patient in making rational decisions about the use of alternative therapies. This elective focuses on the utility of drugs from natural sources in today’s practice environment and surveys the products of animals, plants, microbes, and biotechnology that will impact future therapeutic strategies.

3 credits

**PSCI 1376 Development of Newly Approved Drug Therapies**

The FDA 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 new 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 be covered.

2 credits

---

**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 and a significant experience in laboratory research.

**Degree Description**

The Master of Biomedical Sciences Program is a full-time, graduate level program that provides the student with a broad background in the biomedical sciences, laboratory experiences, and research skills. Successful completion of the program leads to a Master of Biomedical Sciences degree. The curriculum is designed to prepare and graduate students who have extensive knowledge, 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. In addition, the curriculum will make the successful student a competitive candidate for admission to post baccalaureate professional schools offering degrees in the health sciences.

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 six basic science courses, but allows the student to choose areas of emphasis, such as physiology, pharmacology, microbiology and immunology, or biochemistry. 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, Professional Development, Advanced Topics, Seminars in Biomedical Sciences, Fundamentals of Research, Ethics of Research and Experimentation, Thesis Proposal, Laboratory Research, and Thesis. A series of electives and independent studies 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 students who are accepted into another professional program.

The Master of Biomedical Sciences Program will also benefit students who wish to improve their credentials for application to medical school or other health professions programs. 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.
   - Medical College Admission Test (MCAT) scores. Contact the MCAT Program Office at 202/828-0690 or visit http://www.aamc.org/students/applying/mcat.
4. Two letters of recommendation (or one committee letter).
5. Official transcripts from each college or university attended.
6. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
7. Passage of the Midwestern University criminal background check.

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

Application Process and Deadlines
To be considered for admission into the Master of Biomedical Sciences Program, applicants must submit the following items to the Office of Admissions:

1. A completed Application for Admission to the Master of Biomedical Sciences Program
   • The application, forms and instructions are accessible at www.midwestern.edu; click on the IL Biomedical Sciences Program section.
2. A nonrefundable, nonwaivable application fee of $50
3. Two letters of recommendation (or one committee letter from the applicant’s college or university). The Office of Admissions will accept signed and sealed letters from prehealth advisors or committees, science professors, and health professionals
4. Official transcripts from each college or university attended. Applicants must enclose official transcripts 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.
5. 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).
6. 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

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 currently uses a rolling admissions process. Completed applications are reviewed and decisions are made at regular intervals during the admissions cycle. Students matriculate into the full-time Program starting in the Fall Quarter. Admission is considered on a competitive basis for prospective students who hold a bachelor’s level or higher degree from regionally accredited programs. Multiple criteria are used to select the most qualified candidates from an applicant pool that exceeds the number of seats available.

Applications are reviewed by the Office of Admissions for completeness and referred to the Director of the Biomedical Sciences Program. Final acceptance into the Master of Biomedical Sciences Program is determined by the Biomedical Sciences Program Admissions Committee with the approval of the Director of the Program and the Dean of the College of Health Sciences. Decisions on acceptance are made until the maximum enrollment for each program is reached. Candidates are encouraged to submit their completed application early in the admissions cycle to maximize competitiveness.

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
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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.

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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

**Dual Degree Options**

The Biomedical Sciences Program offers an educational opportunity to current and incoming students in other CHS programs or colleges at Midwestern University. Students accepted into these programs may apply to the Biomedical Sciences Program as dual-degree candidates. The following policies apply:

1. The applicant must apply and be accepted into the clinical program and Biomedical Sciences Program separately. Only applicants meeting minimum entrance requirements for both degree programs will be given an option for the dual-degree program.

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. This may result in deceleration or temporary suspension from the secondary degree program.

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 Credit
Students may request the transfer of previous graduate coursework taken at another accredited university to this degree program. However, no more than 14 credit hours can be accepted as transfer credit. Policies for course transfers can be found in the Midwestern University College of Health Sciences Catalog section titled Advanced Placement/Exemption from Coursework.

Graduation Requirements
To qualify for graduation with a Master of Biomedical Sciences degree from the Biomedical Sciences Program, 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 Biomedical Sciences Program Student Academic Review Committee and the College of Health Sciences 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 complete any three of the following course combinations:

Required Courses: Basic Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 1551</td>
<td>Biochemistry I</td>
</tr>
<tr>
<td>BIOC 1552</td>
<td>Biochemistry II</td>
</tr>
<tr>
<td>MICR 0583</td>
<td>Medical Microbiology</td>
</tr>
<tr>
<td>MICR 0599</td>
<td>Molecular Immunology</td>
</tr>
<tr>
<td>PHAR 1641</td>
<td>Pharmacology I</td>
</tr>
<tr>
<td>PHAR 1642</td>
<td>Pharmacology II</td>
</tr>
<tr>
<td>PHAR 1643</td>
<td>Pharmacology III</td>
</tr>
<tr>
<td>PHYS 1510</td>
<td>Human Physiology I</td>
</tr>
<tr>
<td>PHYS 1511</td>
<td>Human Physiology II</td>
</tr>
</tbody>
</table>

Required Courses: Research and Thesis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0512</td>
<td>Fundamentals of Research</td>
</tr>
<tr>
<td>BISC 0520</td>
<td>Ethics of Research and</td>
</tr>
<tr>
<td></td>
<td>Experimentation</td>
</tr>
<tr>
<td>BISC 0526</td>
<td>Research Design and Methodology</td>
</tr>
<tr>
<td>BISC 0527</td>
<td>Principles of Biostatistics</td>
</tr>
<tr>
<td>BISC 0528</td>
<td>Literature Review</td>
</tr>
<tr>
<td>BISC 0530</td>
<td>Professional Development</td>
</tr>
<tr>
<td>BISC 0560</td>
<td>Laboratory Research for Thesis</td>
</tr>
<tr>
<td>BISC 0654</td>
<td>Seminar in the Biomedical</td>
</tr>
<tr>
<td></td>
<td>Sciences</td>
</tr>
</tbody>
</table>

160
### Elective Options

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0680</td>
<td>Thesis</td>
</tr>
<tr>
<td>ANAT 0565</td>
<td>Human Neuroscience</td>
</tr>
<tr>
<td>ANAT 1500</td>
<td>Human Gross Anatomy &amp; Embryology</td>
</tr>
<tr>
<td>BIOC 0552</td>
<td>Clinical Biochemistry and Nutrition</td>
</tr>
<tr>
<td>BIOC 1445</td>
<td>Principles and Practices of Enteral and Total Parenteral Nutrition</td>
</tr>
<tr>
<td>BIOC 1447</td>
<td>Nutrition in Preventative Medicine</td>
</tr>
<tr>
<td>BISC 0580</td>
<td>Pathophysiology</td>
</tr>
<tr>
<td>BISC 0644</td>
<td>Biomedical Imaging</td>
</tr>
<tr>
<td>BISC 0645</td>
<td>Biomarkers in Health and Disease</td>
</tr>
<tr>
<td>BISC 0850</td>
<td>Intestinal Bacteria in Health and Disease</td>
</tr>
<tr>
<td>PHAR 1420</td>
<td>Medical Spanish</td>
</tr>
<tr>
<td>PHAR 1430</td>
<td>Cardiovascular Pharmacology</td>
</tr>
<tr>
<td>PHYS 1637</td>
<td>Exercise Physiology</td>
</tr>
<tr>
<td>PPRA 1321</td>
<td>Medication Management in Primary and Secondary Schools</td>
</tr>
<tr>
<td>PSCI 1371</td>
<td>Alternative Therapies and Natural Products</td>
</tr>
<tr>
<td>PSCI 1376</td>
<td>Development of Newly Approved Drug Therapies</td>
</tr>
</tbody>
</table>

### Sample Curriculum

**Total Credit Hours for Sample Curriculum: 87**

#### First Year

**Total:** 43

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>BISC 0512</td>
<td>Fundamentals of Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BISC 0526</td>
<td>Research Design and Methodology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BISC 0530</td>
<td>Professional Development</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>BIOC 1551</td>
<td>Biochemistry I</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>PHYS 1510</td>
<td>Human Physiology I</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0527</td>
<td>Principles of Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOC 1552</td>
<td>Biochemistry II</td>
<td>4.5</td>
</tr>
<tr>
<td>MICR 0599</td>
<td>Molecular Immunology</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1511</td>
<td>Human Physiology II</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

#### Spring Quarter

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0520</td>
<td>Ethics of Research and Experimentation</td>
<td>2</td>
</tr>
<tr>
<td>BISC 0528</td>
<td>Literature Review</td>
<td>2</td>
</tr>
<tr>
<td>BISC 0560</td>
<td>Laboratory Research for Thesis</td>
<td>3</td>
</tr>
<tr>
<td>BISC 0580</td>
<td>Pathophysiology</td>
<td>4</td>
</tr>
<tr>
<td>MICR 0583</td>
<td>Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

#### Second Year

**Total:** 44

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
<td>BISC 0610</td>
<td>Thesis Proposal</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BISC 0635</td>
<td>Advanced Topics/Journal Club</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BISC 0660</td>
<td>Laboratory Research for Thesis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BISC 0850</td>
<td>Intestinal Bacteria in Health and Disease</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHYS 1637</td>
<td>Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

#### Fall Quarter

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0653</td>
<td>Seminar in the Biomedical Sciences</td>
<td>1</td>
</tr>
<tr>
<td>BISC 0661</td>
<td>Laboratory Research for Thesis</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 1641</td>
<td>Pharmacology I</td>
<td>4</td>
</tr>
<tr>
<td>PSCI 1371</td>
<td>Alternative Therapies and Natural Products</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

#### Winter Quarter

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0662</td>
<td>Laboratory Research for Thesis</td>
<td>4</td>
</tr>
<tr>
<td>BISC 0654</td>
<td>Seminar in the Biomedical Sciences</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 1642</td>
<td>Pharmacology II</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
Spring Quarter

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISC 0663</td>
<td>Laboratory Research for Thesis</td>
<td>3</td>
</tr>
<tr>
<td>BISC 0680</td>
<td>Thesis</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 1643</td>
<td>Pharmacology III</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

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.

**BIOC 1551 Biochemistry I**

This course combines lectures and small group discussions of clinical case studies in workshops. Lectures address structure-function relationships in major biomolecules, human metabolism and cell biology. Workshops feature clinical case studies to illustrate principles of clinical biochemistry and application to the practice of pharmacy. Workshop topics may include anemias, cytochrome p450 enzymes, dangers of dietary supplements, diabetes mellitus, drug biomembrane transport, environmental toxins and hemostasis disorders.

3.5 credits

**BIOC 1552 Biochemistry II**

This course combines lectures and small group discussions of clinical case studies in workshops. Lectures address principles of human gene expression, chromosomal abnormalities, pharmacogenomics, multifactorial inheritance, and nutrition. Workshops feature clinical case studies to illustrate principles of clinical biochemistry and application to the principles of biochemistry and to the practice of pharmacy.

4.5 credits

Prerequisites: BIOC 1551 Biochemistry I

**BISC 0512 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

**BISC 0520 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

**BISC 0526 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. This is the foundational course for the Master’s Project.

3 credits

**BISC 0527 Principles of Biostatistics**

This course covers elementary statistical techniques, introduction to probability, measurement theory, correlation and regression analysis, sampling, significance tests, and statistical inference.

3 credits

**BISC 0528 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

**BISC 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, writing cover letters/personal statements, preparing posters and oral presentations, writing scientific manuscripts, and grant writing.

1 credit

**BISC 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.

1-6 credits each course

Prerequisites: BISC 0512 Fundamentals of Research

**BISC 0610 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
BISC 0635 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.
3 credits

BISC 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

BISC 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

BISC 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

MICR 0583 Medical Microbiology
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.
4 credits

MICR 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

PHAR 1641, 1642, 1643 Pharmacology I, II, III
Pharmacology studies the properties and effects of drugs and, in a more general sense, the interactions between chemical compounds and living systems. This series includes the general principles of pharmacology; the dynamics of absorption, distribution, metabolism, and elimination of drugs; drug testing in humans; and the role of official regulatory agencies. The student studies drugs affecting the autonomic nervous system; drugs acting on the central nervous system; cardiovascular drugs; chemotherapy of microbial, parasitic, and neoplastic diseases; drugs acting on blood and blood-forming organs; and hormones and hormone antagonists. Topics such as principles of toxicology, vitamins, gastric antacids, digestants, laxatives, antihistamines, antiserotonin agents, and drugs causing birth defects are included.
PHAR 1641: 4 credits; PHAR 1642: 4 credits; PHAR 1643: 2 credits

PHYS 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 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, digestive, endocrine and reproductive systems.
Each course 3.5 credits

Electives

ANAT 0565 Human Neurosciences
This is an integrated, interdisciplinary course in which students learn to identify and describe the principal 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 Physician Assistant Program.
4 credits
ANAT 1500 Human Gross Anatomy & Embryology
This course presents lectures and laboratory (human cadaver prosection, microscopy) sessions emphasizing the embryologic development of the human body, the relationship between body structure and function, and the use of gross human anatomy in physical diagnosis. 7 credits

BIOC 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

BIOC 1445 Principles and Practices of Enteral and Total Parenteral Nutrition
This course surveys the biochemical, metabolic, and nutritional sciences underlying the provision of nutritional support, and provides a basic introduction to the clinical practices involved in its implementation. During the course students apply information provided in lectures to the provision of nutrition support in selected clinical cases. 1 credit
Prerequisites: BIOC 1551, 1552 Biochemistry I, II

BIOC 1447 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

BISC 0580 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

BISC 0636, 0637, 0638, 0639, 0640 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.

BISC 0644 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 hour lab exercise (hands-on experience with compound, fluorescence, and confocal microscopes, as well as computer programs for image analysis). 2 credits
Prerequisite: Biochemistry I (BIOC 1551) and Fundamentals of Research (BISC 0512) or prior course director approval.

BISC 0645 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: Biochemistry I (BIOC 1551) or equivalent.

BISC 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
Prerequisites: PHYS 1510, 1511 Human Physiology I, II; BIOC 1551, 1552 Biochemistry I, II; and MICR 0583 Medical Microbiology

PHAR 1410 Pharmacologic Aspects of Drug Abuse
This elective provides an in-depth understanding of the pharmacology of the common drugs of abuse including alcohol, cocaine, stimulants, hallucinogens, and opioids. Particular emphasis is given to basic pharmacokinetic and pharmacodynamic mechanisms as they relate to the effects of drugs and to the development of drug tolerance and
dependence. Current theories regarding the physiologic basis of drug-seeking behavior and the development of drug dependence are presented. In addition, various social, legal, and ethical aspects of the drug abuse problem are considered.

**PHAR 1420 Medical Spanish**
The elective provides medical, pharmacy, physician assistant and biomedical sciences students with the Spanish vocabulary necessary to understand and converse in the fields of medicine and healthcare. The course has been designed to enhance communicating with the Latino patient as well as understanding cultural attitudes, which may impact medical care. Listening, comprehension, and conversational skills will be stressed through dialogues and oral presentations. Critical learning skills that students are encouraged to develop are cooperative learning and effective group dynamics.

2 credits
Prerequisites: Two years of high school Spanish or college Spanish

**PHAR 1430 Cardiovascular Pharmacology**
Cardiovascular (CV) disease is a national health problem of major consequence. Its treatment is one of the principal problems facing modern medicine. This elective is designed to familiarize the student with the most significant of all CV diseases, atherosclerosis; and potential anti-atherosclerotic effectiveness and mechanisms of various CV drugs and non-drug forms of therapy.

2 credits
Prerequisites: PHAR 0584, 0585 Pharmacology I, II or PHAR 1641, 1642 Pharmacology I, II

**PHYS 1637 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
Prerequisites: PHYS 1510, 1511 Human Physiology I, II

**PPRA 1321 Medication Management in Primary and Secondary Schools**
This course describes medication management in schools including transfer, storage, administration, use, and disposal. It addresses five important related issues: documentation, delegation of medication management responsibility, liability concerns, therapeutic issues, and the availability of information needed to adequately perform medication management. It reviews medication management guidelines and relevant conceptual frameworks, including rational drug therapy and polycentric authority, and provides a summary of the empirical literature. It shows that pharmacy has been involved very little in this problem in the past, and specifies ways that individual pharmacists and pharmacies, can get involved in medication management in schools and improve the situation.

2 credits

**PSCI 1371 Alternative Therapies and Natural Products**
Alternative therapies are being used by a growing percentage of the population and are becoming more visible to mainstream medical practice. Health care professionals should develop the knowledge and skills necessary to aid the patient in making rational decisions about the use of alternative therapies. This elective focuses on the utility of drugs from natural sources in today’s practice environment and surveys the products of animals, plants, microbes, and biotechnology that will impact pharmacy tomorrow.

3 credits

**PSCI 1376 Development of Newly Approved Drug Therapies**
The FDA 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 new 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 be covered.

2 credits

**FACULTY**

**Mae Ciancio, Ph.D.**
Loyola University
Stritch School of Medicine
Assistant Professor

**Michael J. Fay, Ph.D.**
University of Mississippi
School of Pharmacy
Director and Professor

**Joshua Z. Gasiorowski, Ph.D**
Northwestern University
Integrated Graduate Programs
Assistant Professor

**Kolla Kristjansdottir, Ph.D.**
Duke University
Duke University Medical Center
Assistant Professor

**Kathy J. LePard, Ph.D.**
Ohio State University
Program Coordinator of the Master of Arts in Biomedical Sciences Program and Associate Professor
**MISSION**
The Midwestern University Doctor of Psychology (Psy.D.) in Clinical Psychology Program educates students in the general practice of evidence-based clinical psychology serving a diverse population.

**ACCREDITATION**

**NATIONAL REGISTER OF HEALTH SERVICE PROVIDER STATUS**
This program meets the "Guidelines for Defining 'Doctoral Degree in Psychology'" as implemented by the ASPPB/National Register Designation Project. Therefore, a graduate of this designated program who decides to apply for licensure as a psychologist typically will meet the jurisdictional educational requirements for licensing. However, individual circumstances vary, and, there are additional requirements that must be satisfied prior to being licensed as a psychologist. Please contact the state/provincial/territorial licensing board in the jurisdiction in which you plan to apply for exact information. Additional information including links to jurisdictions is available on the ASPPB's web site: www.asppb.org.

Once licensed, a graduate of a designated program is eligible to apply for credentialing as a Health Service Psychologist by the National Register of Health Service Psychologists. Graduation from a designated program typically ensures that the program completed meets the educational requirements for the National Register credential. However, individual circumstances vary, and, there are additional requirements that must be satisfied prior to being credentialed by the National Register of Health Service Psychologists and listed on the FindaPsychologist.org database. Doctoral students may apply to have their credentials banked and reviewed prior to licensure. For further information about the National Psychologist’s Trainee Register and the National Register application process, consult the National Register’s web site: www.nationalregister.org.

**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 objectives of the training model endorsed by the American Psychological Association (APA). Students are educated and trained in the following psychological domains related to the current body of knowledge: the biological aspects of behavior; cognitive and affective aspects of behavior; social aspects of behavior; history and systems of psychology; psychological measurement; research methodology; techniques of data analysis; individual differences; human development; dysfunctional behavior and psychopathology; professional standards and ethics; theories and methods of assessment and diagnosis; effective interventions; consultation; supervision; efficacy of interventions; issues of cultural and individual diversity; and attitudes essential for lifelong learning, scholarly inquiry, and professional problem-solving.

The program centers on the development of appropriate attitudes, knowledge, and skills reflected in the National Council of Schools and Programs of Professional Psychology (NCSPPP) identified training competencies of relationship, assessment, intervention, research/evaluation, consultation/education, management/supervision, diversity, and professionalism.
The Program’s goal is to educate and train students in the practitioner-scholar training model for the practice of clinical psychology. There are eight specific required competencies. The program has key points in the curriculum targeted to assess progress in attaining these competencies:

1. **Relationship Competency**: The relationship competency requires a demonstration of interpersonal skills. This includes the capacity to develop and maintain a constructive working alliance with clients. The ability to consult and collaborate with others, such as peers, colleagues, students, supervisors, and members of other disciplines, consumers of services and community organizations, is considered part of relationship skills. The knowledge, skills, and attitudes related to this competency are: open-mindedness, belief in the capacity for change in human attitudes and behavior, appreciation of individual and cultural diversity, personal integrity and honesty, and belief in the value of self-awareness.

2. **Assessment Competency**: The assessment competency is grounded in the foundation of knowledge, skills, and professional attitudes in the areas of human development and psychopathology. The assessment competency requires an ability to acquire and synthesize multiple sources of data to develop appropriate diagnoses and treatment plans and to communicate that information in an effective manner. Students learn the importance of cultural factors in the assessment process. Competence in assessment is identified through the development of proficiency in the administration, scoring and interpretation of standard assessment instruments.

3. **Intervention Competency**: The intervention competency requires students to demonstrate an ability to intervene with clients from an identified theoretical perspective. Intervention is the ability to develop realistic formulations for understanding psychological issues using relevant theory and research while effectively implementing and revising treatment strategies; to evaluate the effectiveness of chosen intervention approaches; to recognize the limitations of different perspectives; and to adjust traditional models of treatment and intervention planning to effectively meet the needs of diverse populations. Students demonstrate knowledge, skills, and attitudes congruent with evidence-based practice rationales and can articulate them.

4. **Research and Evaluation Competency**: The research and evaluation competency rests on the student’s foundation of knowledge, skills, and professional attitudes in the areas of tests and measurements, statistics, and research design. This competency is the ability to organize, synthesize and interpret scholarly information; to integrate scholarly findings into clinical practice; to expand awareness of the limitations of clinical and scientific inquiry; to design and critique approaches of inquiry; to expand understanding of the foundations of scientific psychology; and to recognize the social, cultural, and political process in the production of scientific knowledge.

5. **Consultation and Education Competency**: The consultation and education competency is the ability and skill needed to teach others through oral and written presentations, to provide feedback regarding an individual or system to multiple sources; to facilitate and evaluate growth of knowledge, skills, and attitudes in a learner; to effectively provide peer consultation and constructive feedback; and to develop a productive relationship with service providers.

6. **Management and Supervision Competency**: The management and supervision competency relates to the ability to demonstrate an understanding of the business aspects of psychological practice; to have an awareness of the relevant laws and standards of practice; to effectively use supervision and professional review; to develop supervisory skills toward use in administration; to effectively manage cases; to have an awareness of contemporary issues related to the regulation and practice of psychology; and to integrate outcomes from scholarship while maintaining quality control.

7. **Diversity Competency**: The diversity competency is the ability to articulate one’s own cultural impact on values and world view; to understand the psychological impact of privilege, prejudice, cultural and sociopolitical structures; to identify individual variation across cultures and pathology; and to appreciate the impact of culture on the historical and philosophical foundations of psychology.

8. **Professionalism Competency**: The professionalism competency is defined by the ability to apply ethical and professional standards to interactions with clients and with others including peers, supervisors, faculty, and other professionals; to become acclimated to the profession through advisement, modeling and education; to engage in quality control; to be effective in various professional roles; and to have a commitment to life-long learning. Professionalism also includes the ability to maintain self-care, the ability to demonstrate self-reflection, the maintenance of appropriate boundaries, and a willingness to recognize errors and respond appropriately. Students must demonstrate a professional manner and follow the professional and university codes of ethics and conduct.

**Program Philosophy**
The Doctor of Psychology in Clinical Psychology Program follows the practitioner-scholar training model of preparation 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. This program aims to educate and
train individuals to enter careers emphasizing the delivery of
direct psychological services and consultation. Relevant
theory, research, and field experiences are integrated toward
the development of competent and ethical practitioners 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
217 quarter hours is required for the Psy.D. degree.
However, students typically complete the program with at
least 237 credits. Note, some evening classes or weekend
courses may be scheduled. The maximum allotted time for
completion of the program is seven years.

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 total of 101 credit hours.

Clerkship
The Psy.D. Program offers a number of supervised pre-
practicum clinical training experiences in the first year of
study. Under supervision of program faculty for at least two
quarters, students work at clinical training sites in a variety of
clinical roles appropriate for their level of training. Students
can elect 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 supervisor.

Clinical Practicum
All students must successfully complete practicum
experiences in the second, third and fourth years of study.
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. Practicum is a field experience
at an off-campus clinical training site that can span either the
academic or calendar year. Practicum training is completed at
numerous hospitals, agencies, and organizations throughout
the Chicago metropolitan 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 complete a minimum of nine
quarters of practicum. Students typically work approximately
16 to 20 hours per week in a clinical setting (3 credit hours
per quarter). The practicum experiences in psychodiagnostics
and psychotherapy total approximately 1,500 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. 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.

Internship
The predoctoral 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 the coursework
and practicum experiences. The internship is a critical
component of the Psy.D. Program and cannot be waived.
Students must satisfactorily complete all required
coursework, clerkship, and practicum experiences, as well as
the Dissertation proposal before beginning the internship.
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.

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 9-12 months to complete. With the Program Director’s approval, students needing additional time beyond the internship year to complete the Dissertation must register for PSYC 1990-1999 Dissertation Post-Internship I - X, as needed, a 0.5 credit hour course.

Student Admissions, Outcomes, and Other Data

Time to Completion for all Students Entering the Program

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of students with doctoral degree conferred on transcript</td>
<td>8</td>
<td>12</td>
<td>5</td>
<td>10</td>
<td>26</td>
<td>19</td>
<td>17</td>
<td>97</td>
</tr>
<tr>
<td><strong>Mean</strong> number of years to complete the program</td>
<td>4.0</td>
<td>3.9</td>
<td>4.2</td>
<td>4.7</td>
<td>4.9</td>
<td>5.1</td>
<td>5.1</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Median</strong> number of years to complete the program</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Time to Degree Ranges

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in less than 5 years</td>
<td>8</td>
<td>100%</td>
<td>12</td>
<td>100%</td>
<td>4</td>
<td>80.0%</td>
<td>4</td>
<td>40.0%</td>
<td>9</td>
<td>34.6%</td>
<td>6</td>
<td>31.6%</td>
<td>4</td>
<td>23.5%</td>
</tr>
<tr>
<td>Students in 5 years</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>20.0%</td>
<td>5</td>
<td>50.0%</td>
<td>11</td>
<td>42.3%</td>
<td>9</td>
<td>47.4%</td>
<td>8</td>
<td>47.1%</td>
</tr>
<tr>
<td>Students in 6 years</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>10.0%</td>
<td>4</td>
<td>15.4%</td>
<td>1</td>
<td>5.3%</td>
<td>4</td>
<td>23.5%</td>
</tr>
<tr>
<td>Students in 7 years</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>2</td>
<td>7.7%</td>
<td>3</td>
<td>15.8%</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>Students in more than 7 years</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

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.

Estimated Cost of Attendance

<table>
<thead>
<tr>
<th>Description</th>
<th>2013-2014 1st-year Cohort Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition for full-time students (in-state)</td>
<td>$24,656</td>
</tr>
<tr>
<td>Tuition for full-time students (out-of-state)</td>
<td>$24,656</td>
</tr>
<tr>
<td>Tuition per credit hour for part-time students (if applicable)</td>
<td>N/A</td>
</tr>
<tr>
<td>University/institution fees or costs</td>
<td>$855</td>
</tr>
<tr>
<td>Additional estimated fees or costs to students (e.g., books, travel, etc.)</td>
<td>$2,353</td>
</tr>
</tbody>
</table>

Internship Placement

Table 1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who sought or applied for internships*</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Students who obtained internships</td>
<td>15</td>
<td>100%</td>
<td>16</td>
<td>94.1%</td>
<td>13</td>
<td>92.9%</td>
<td>19</td>
</tr>
<tr>
<td>Students who obtained APA/CPA-accredited internships</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>5.9%</td>
<td>2</td>
<td>14.3%</td>
<td>3</td>
</tr>
<tr>
<td>Students who obtained APPIC member internships that were not APA/CPA-accredited (if applicable)</td>
<td>14</td>
<td>93.3%</td>
<td>11</td>
<td>64.7%</td>
<td>10</td>
<td>71.4%</td>
<td>14</td>
</tr>
<tr>
<td>Students who obtained other membership organization internships (e.g., CAPIC) that were not APA/CPA-accredited (if applicable)</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Students who obtained internships conforming to CDSPP guidelines that were not APA/CPA-accredited (if applicable)</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Students who obtained other internships that were not APA/CPA-accredited (if applicable)</td>
<td>1</td>
<td>6.7%</td>
<td>4</td>
<td>23.5%</td>
<td>1</td>
<td>7.1%</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who obtained internships</td>
<td>N % N % N % N % N % N % N %</td>
<td>15 100% 16 94.1% 13 92.9% 19 100% 20 95.2% 16 100% 11 91.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students who obtained paid internships</td>
<td>N % N % N % N % N % N %</td>
<td>14 93.0% 15 88.2% 13 92.9% 18 94.7% 20 95.2% 16 100% 11 91.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students who obtained half-time internships</td>
<td>if applicable</td>
<td>0 0.0% 0 0.0% 0 0.0% 1 5.3% 0 0.0% 0 0.0% 0 0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attrition

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students for whom this is the year of first enrollment (i.e. new students)</td>
<td>N % N % N % N % N % N % N % N %</td>
<td>22 - 24 - 26 - 15 - 12 - 21 - 20 - 18 -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students whose doctoral degrees were conferred on their transcripts</td>
<td>N % N % N % N % N % N % N % N %</td>
<td>17 77.3% 21 87.5% 15 57.7% 4 26.7% 0 0.0% 0 0.0% 0 0.0% 0 0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students still enrolled in program</td>
<td>N % N % N % N % N % N % N % N %</td>
<td>0 0.0% 3 12.5% 4 15.4% 9 60.0% 11 91.7% 17 81.0% 19 95.0% 18 100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students no longer enrolled for any reason other than conferral of doctoral degree</td>
<td>N % N % N % N % N % N % N % N %</td>
<td>5 22.7% 0 0.0% 7 26.9% 2 13.3% 1 8.3% 4 19.0% 1 5.0% 0 0.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Graduation Rate

Of those students who matriculated in 2006, 77.3% (17 of 22) have graduated with the doctoral degree. Of those students who matriculated in 2007, 87.5% (21 of 24) have graduated with the doctoral degree. Of those students who matriculated in 2008, 57.7% (15 of 26) have graduated with the doctoral degree. Of those students who matriculated in 2009, 26.7% (4 of 15) have graduated with the doctoral degree.

Licensure

<table>
<thead>
<tr>
<th>Outcome</th>
<th>2003-2004 to 2010-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of students with doctoral degrees conferred on transcript in time period</td>
<td>34</td>
</tr>
<tr>
<td>Number of students with doctoral degrees conferred on transcripts who became licensed doctoral psychologists in time period</td>
<td>26</td>
</tr>
<tr>
<td>Licensure percentage</td>
<td>76.5%</td>
</tr>
</tbody>
</table>

Per recommendation of the American Psychological Association (APA), licensure information is calculated and presented for students 2 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. Please refer to the Admissions website (http://www.midwestern.edu/programs-and-admission/clinical-psychology/admissionapply.html#applicatio) for the current deadlines for priority consideration.

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 undergraduate grade point average (GPA) of 3.00 on a 4.00 scale is expected.
   - If the applicant has graduate courses, but no degree granted, this will be viewed as an extension of the undergraduate work and will be evaluated as part of a cumulative GPA.
   - If the applicant has a conferred graduate degree in psychology or a related mental health field from a regionally accredited university, the GPA from that graduate program will be weighted more heavily than the undergraduate GPA.
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, 2010.
   - 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.

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.

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

Application Process and Deadlines
Applicants are advised to complete the application file as early as possible to ensure timely consideration.

To be considered for admission to the Clinical Psychology Program, students must submit the following to the Office of Admissions:

1. Completed Applications
   - The application, forms and instructions are available at www.midwestern.edu; click on the IL Clinical Psychology Program section. For questions about the application or admissions process, contact the Office of Admissions at 800/458-6253 or e-mail at admissil@midwestern.edu.

2. Letters of recommendation
   - Applicants must submit three properly signed and sealed letters of recommendation from professionals who know the applicant well (e.g. teachers, advisors, professional colleagues or supervisors).

3. A personal statement that reflects the educational and career goals of applicants and provides a self-appraisal of their qualifications for the program and profession. Applicants are encouraged to include explanations of any factors in their application materials that might impact evaluations of their application.

4. Current curriculum vitae or resume.

5. Official transcripts from all postsecondary schools attended.

6. GRE scores receive consideration in all applicant admission applications, although the GRE score is supplemental to other admissions data. Applicants are required to submit official GRE general test score directly to Midwestern University from the Educational Testing Service.
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: A 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: A candidate must be able to communicate effectively, efficiently and sensitively with patients 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 sense of touch and vision. The candidate must possess sufficient postural control, neuromuscular control and eye-to-hand coordination.

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 fashion. The candidate must be able to comprehend three-dimensional relationships and understand spatial relationships.

5. Behavioral and Social Attributes: A 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 certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who
may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean and Program Director, will identify and discuss what accommodations, if any, the College (Program) would need to make that would allow the candidate to complete the curriculum. The College (Program) 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.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

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 M.A. degree in Clinical Psychology is awarded if the following conditions are fulfilled by students in the Psy.D. Program:

1. Satisfactory completion of 101 credit hours including all required courses (82 credits), Interprofessional Education course (1 credit), clerkships (2 credits), and practica and practicum seminars (15 credits).
2. Attainment of a cumulative grade point average of 3.0 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. Favorable recommendation for conferral of the master’s degree from the University Faculty Senate.
5. Settlement of all financial accounts with the University.

To receive the Psy.D. in Clinical Psychology, 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 217 credits consisting of all the required courses;
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. All students are required to complete at least one year of full-time residency (or its equivalent) at the 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 practica and a full-time predoctoral internship during their residency in the Program.

DOCTORAL LEVEL 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 postdoctoral supervised experience and successful completion of the Examination for Professional Practice of Psychology (EPPP) as well as state or provincial requirements. Licensure requirements vary from jurisdiction to jurisdiction. For more information see www.asppb.net.

CURRICULUM
The following curriculum applies to all students who matriculated in Fall 2013 or thereafter. For students who matriculated prior to Fall 2011, refer to the 2012-2013 Midwestern University Catalog for the relevant curriculum listing.

Total quarter hour credits for Psy.D.: 217-237

Note: The Clinical Psychology Program reserves the right to alter its curriculum however and whenever it deems appropriate.

First Year
Total Quarter Credit Hours Required First Year: 46

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE 1599</td>
<td>Interprofessional Education I 1</td>
<td></td>
</tr>
<tr>
<td>PSYC 1501</td>
<td>Professional Issues and Ethics 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1504</td>
<td>Research Methods and Design 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1505</td>
<td>Professional Development Seminar I</td>
<td></td>
</tr>
<tr>
<td>PSYC 1515</td>
<td>Tests and Measurements I 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1530</td>
<td>Introduction to Psychotherapy 4</td>
<td></td>
</tr>
<tr>
<td>PSYC 1550</td>
<td>Biological Bases of Behavior 3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1502</td>
<td>Life Span Development I 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1506</td>
<td>Professional Development Seminar II</td>
<td></td>
</tr>
<tr>
<td>PSYC 1516</td>
<td>Tests and Measurements II 2</td>
<td></td>
</tr>
<tr>
<td>PSYC 1524</td>
<td>Intelligence Testing I 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1525</td>
<td>Intelligence Testing II 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1582</td>
<td>Clerkship I 1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1503</td>
<td>Life Span Development II 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1510</td>
<td>Statistics I 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1526</td>
<td>Personality Assessment I: Objective Techniques 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1527</td>
<td>Personality Assessment II: Projective Techniques 2</td>
<td></td>
</tr>
<tr>
<td>PSYC 1565</td>
<td>History and Systems 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1583</td>
<td>Clerkship II 1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Second Year
Total Quarter Credit Hours Required Second Year: 55-59

<table>
<thead>
<tr>
<th>Summer Quarter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1600</td>
<td>Practicum (Optional) 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1601</td>
<td>Practicum Seminar (Optional) 1</td>
<td></td>
</tr>
<tr>
<td>PSYC 1654</td>
<td>Social and Cultural Bases of Behavior 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 1660</td>
<td>Cognitive-Affective Bases of Behavior I 3</td>
<td></td>
</tr>
</tbody>
</table>

174
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1669</td>
<td>Psychopathology I: Anxiety and Personality Disorders</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1611</td>
<td>Advanced Statistics and Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1620</td>
<td>Advanced Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1640</td>
<td>Introduction to Neuropsychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1670</td>
<td>Psychopathology II: Depressive, Bipolar and Schizophrenia Spectrum Disorders</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1682</td>
<td>Diagnostic Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1683</td>
<td>Diagnostic Practicum Seminar I</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1632</td>
<td>Psychodynamic Approaches to Psychotherapy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1636</td>
<td>Behavior Therapy</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 1671</td>
<td>Child Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1684</td>
<td>Diagnostic Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1685</td>
<td>Diagnostic Practicum Seminar II</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1631</td>
<td>Cognitive Behavioral Theories and Approaches to Psychotherapy</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1650</td>
<td>Psychopharmacology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1680</td>
<td>Research Seminar: Integration of Science and Practice</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 1681</td>
<td>Dissertation Development</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1686</td>
<td>Diagnostic Practicum III</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1687</td>
<td>Diagnostic Practicum Seminar III</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1630</td>
<td>Advanced Psychotherapy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1771</td>
<td>Advanced Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1781</td>
<td>Dissertation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1782</td>
<td>Therapy Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1783</td>
<td>Therapy Practicum Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1705</td>
<td>Systems Theory</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1722</td>
<td>Professional Development and Lifelong Learning</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1720</td>
<td>Practicum (Optional)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1721</td>
<td>Practicum Seminar (Optional)</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>0-4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4-12</td>
</tr>
</tbody>
</table>

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1710</td>
<td>Diversity in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1730</td>
<td>Advanced Psychotherapy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1776</td>
<td>Health Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1784</td>
<td>Therapy Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1785</td>
<td>Therapy Practicum Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1720</td>
<td>Practicum (Optional)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1721</td>
<td>Practicum Seminar (Optional)</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1800</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1801</td>
<td>Practicum Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1811</td>
<td>Dissertation</td>
<td>2</td>
</tr>
</tbody>
</table>

**Fourth Year:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1708</td>
<td>Advanced Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1760</td>
<td>Cognitive-Affective Bases of Behavior II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1770</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1786</td>
<td>Therapy Practicum III</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1787</td>
<td>Therapy Practicum Seminar III</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

**Total Quarter Credit Hours Required Fourth Year:** 20-28

**Summer Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1710</td>
<td>Diversity in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1730</td>
<td>Advanced Psychotherapy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1771</td>
<td>Advanced Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1781</td>
<td>Dissertation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1782</td>
<td>Therapy Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1783</td>
<td>Therapy Practicum Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1708</td>
<td>Advanced Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1760</td>
<td>Cognitive-Affective Bases of Behavior II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1770</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1786</td>
<td>Therapy Practicum III</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1787</td>
<td>Therapy Practicum Seminar III</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1800</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1801</td>
<td>Practicum Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 1811</td>
<td>Dissertation</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1708</td>
<td>Advanced Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1760</td>
<td>Cognitive-Affective Bases of Behavior II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1770</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1786</td>
<td>Therapy Practicum III</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1787</td>
<td>Therapy Practicum Seminar III</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

**Total Quarter Credit Hours Required Fourth Year:** 20-28
Electives 0-4
Total 2-10

Fall Quarter
PSYC 1812  Dissertation II  2
PSYC 1882  Advanced Practicum I  3
PSYC 1883  Advanced Practicum Seminar I  1
Total  6

Winter Quarter
PSYC 1813  Dissertation III  2
PSYC 1884  Advanced Practicum II  3
PSYC 1885  Advanced Practicum Seminar II  1
Total  6

Spring Quarter
PSYC 1814  Dissertation IV  2
PSYC 1886  Advanced Practicum III  3
PSYC 1887  Advanced Practicum Seminar III  1
Total  6

Fifth Year:
Total Quarter Credit Hours Required Fifth Year:  52

Summer Quarter
PSYC 1900  Internship  12.5
PSYC 1921  Dissertation Continuation I  0.5
Total  13

Fall Quarter
PSYC 1901  Internship  12.5
PSYC 1922  Dissertation Continuation II  0.5
Total  13

Winter Quarter
PSYC 1902  Internship  12.5
PSYC 1923  Dissertation Continuation III  0.5
Total  13

Spring Quarter
PSYC 1903  Internship  12.5
PSYC 1924  Dissertation Continuation IV  0.5
Total  13

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.

COURSE DESCRIPTIONS

CORE 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

PSYC 1501 Professional Issues and Ethics
The legal, ethical, and professional issues are discussed in the context of the delivery of mental health services. These issues include American Psychological Association ethical standards, privacy issues, confidentiality, mental health codes, mental health law and legislation, licensure, ethical standards in research, confidentiality in insurance and managed care contexts, and ethical standards in private practice, schools, hospitals and clinics, community settings, and government.
3 credits

PSYC 1502 Life Span Development I
This course examines the major developmental issues from birth through adolescence. The topics include normal and abnormal development in the context of physical, biological, cognitive, social, and emotional functioning. Topics include a study of models of development including learning theory, cognitive theory (Piaget), and Freudian and neo-Freudian theories. Speech and language development are also examined as a basis for later human cognition. Developmental factors related to issues of culture, ethnicity, disabilities, and gender are addressed.
3 credits

PSYC 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 such as culture, gender, religion, ethnicity and cohort are emphasized.
3 credits
Prerequisites: PSYC 1502 Life Span Development I

PSYC 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.
3 credits

PSYC 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 as they pursue education and training to become clinical psychologists. Each seminar is evaluated on a pass/fail basis.
Each course 1 credit

PSYC 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
Prerequisites: PSYC 1504 Research Methods and Design

PSYC 1515 Tests and Measurements I
This is the first course in a two course sequence about the measurement of individual differences designed for students in the clinical psychology program. This course examines the philosophical, historical, and methodological foundations of psychological testing, assessment, and measurement. The course focuses on the statistical basis of validity, reliability, tests of intelligence, personality assessment, counseling and assessment, neuropsychological assessment, computer-assisted assessment, and the assessment of persons with disabilities.
3 credits
Prerequisites: PSYC 1504 Research Methods and Design

PSYC 1516 Tests and Measurements II
This course continues the examination of the measurement of individual differences focusing on the measurement of behavior, affect, achievement, relationships, attitudes, traits, and self-concept that are appropriate in clinical practice. The practical decision making process for clinicians will be emphasized in the context of existing research findings to highlight measurements in various domains for individual change, adaptive testing, test bias, and understanding of cultural influences on test construction, outcome, and recommendations.
2 credits
Prerequisites: PSYC 1515 Tests and Measurements I

PSYC 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
Prerequisites: Concurrent enrollment in PSYC 1525 Intelligence Testing II
**PSYC 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 the areas of test administration, scoring, interpretation of results and report writing.

3 credits

Prerequisites: Concurrent enrollment in PSYC 1524 Intelligence Testing I

---

**PSYC 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

Prerequisites: PSYC 1524 Intelligence Testing I; PSYC 1525 Intelligence Testing II; Concurrent enrollment in PSYC 1527 Personality Assessment II: Projective Techniques

---

**PSYC 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

Prerequisites: PSYC 1524 Intelligence Testing I; PSYC 1525 Intelligence Testing II; Concurrent enrollment in PSYC 1526 Personality Assessment I: Objective Techniques

---

**PSYC 1530 Introduction to Psychotherapy**

From a historical basis, this course introduces the student to the various psychotherapeutic traditions. Treatment approaches examined include psychoanalytic, psychodynamic, Gestalt, behavioral, cognitive/behavioral, interpersonal, and others. Through both didactic and experiential means, the student will be exposed to the fundamental aspects of each treatment approach. Also reviewed is the current literature on empirically verified treatment approaches as well as issues related to culture, ethnicity, gender, and disabilities.

4 credits

Prerequisites: Concurrent enrollment in PSYC 1501 Professional Issues and Ethics

---

**PSYC 1550 Biological Bases of Behavior**

This course examines the historical and current understandings of the physical/neurological underpinnings of human behavior. Recent advances in imaging techniques are examined as they relate to our understanding of the structure and function of the neurological substrate in human functioning.

3 credits

Prerequisites: PSYC 1502 Life Span Development I

---

**PSYC 1565 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

---

**PSYC 1582, 1583 Clerkship I, II**

The clerkship sequence is a supervised pre-practicum field experience for students, focusing on the development of clinical inquiry skills, assessment ability, knowledge of community resources, diversity issues, and consultation skills. A clerkship is a supervised experience that may take place at hospitals, clinics, human service agencies, schools, shelters, or faith-based institutions. Students participating in the clerkship are under the direct supervision of program faculty. A student must complete a minimum of 2 credits of clerkship.

Each course 1 credit

Prerequisites: Approval of Program Director

---

**PSYC 1600, 1720, 1800 Practicum (Optional)**

Each practicum is designed to provide the practical experiences in psychodiagnostics that are appropriate for the training of practitioners in clinical psychology. Each practicum is offered for students attending an externship in the summer quarter if required by the external site.

Each course 3 credits

Prerequisites: Approval of Director of Training and Program Director; Concurrent enrollment in PSYC 1601 Practicum Seminar, PSYC 1721 Practicum Seminar, or PSYC 1801 Practicum Seminar, respectively

---

**PSYC 1601, 1721, 1801 Practicum Seminar (Optional)**

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 a typical clinical setting.
Each course 1 credit
Prerequisites: Approval of Director of Training, and Program
Director; Concurrent enrollment in PSYC 1600 Practicum, PSYC
1720 Practicum, or PSYC 1800 Practicum

**PSYC 1611 Advanced Statistics and Research Methods**
This course is designed to promote 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
Prerequisites: PSYC 1504 Research Methods and Design; PSYC
1510 Statistics I

**PSYC 1615 Theories of Learning**
The basic theories of learning will be described and
contrasted including the works of Hull, Thorndike, Pavlov,
Skinner, Watson, Bandura, Eysenck and Guthrie in regard
to the clinical application of these theoretical and
experimental works.
3 credits
Prerequisites: PSYC 1565 History and Systems

**PSYC 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. Formulating
diagnostic conclusions, clinical report writing, research report
writing, and examination of differential diagnoses are
reviewed with consideration of diversity issues.
3 credits
Prerequisites: PSYC 1524 Intelligence Testing I; PSYC 1525
Intelligence Testing II; PSYC 1526 Personality Assessment I;
Objective Techniques; PSYC 1527 Personality Assessment II:
Projective Techniques

**PSYC 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 of such
therapists as Meichenbaum and Freeman, 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: PSYC 1530 Introduction to Psychotherapy

**PSYC 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: PSYC 1530 Introduction to Psychotherapy

**PSYC 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.
4 credits
Prerequisites: PSYC 1530 Introduction to Psychotherapy and PSYC
1660 Cognitive-Affective Bases of Behavior I. Additionally, this
course builds upon the foundational knowledge related to learning
and behavioral theories acquired in PSYC 1565 History and
Systems.

**PSYC 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: PSYC 1515 Tests and Measurements I; PSYC 1516
Tests and Measurements II; PSYC 1550 Biological Bases of
Behavior

**PSYC 1650 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
Prerequisites: PSYC 1550 Biological Bases of Behavior

**PSYC 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
Prerequisites: PSYC 1502 Life Span Development I

**PSYC 1660 Cognitive-Affective Bases of Behavior I**
Normative human functioning is examined in the context of various theories of learning, behavior and emotion. Application of the theories and models to an understanding of normal human behavior is reviewed. Historic and current research is examined in support of various perspectives in relation to gender, aging, cultural, ethnic and disability issues.
3 credits
Prerequisites: PSYC 1502 Life Span Development I

**PSYC 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 is highlighted.
3 credits
Prerequisites: PSYC 1504 Research Methods and Design; PSYC 1510 Statistics I

**PSYC 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.
3 credits
Prerequisites: PSYC 1669 Psychopathology I: Anxiety and Personality Disorders

**PSYC 1671 Child Psychopathology**
This course provides a broad overview of child and adolescent psychopathology, including a focus on understanding basic concepts, historical context of disorders, developmental influences (including maltreatment), theoretical perspectives, research methodology, and issues related to classification and assessment. An introduction to assessment, diagnosing, case conceptualization, and developing treatment interventions will also be covered.
3 credits
Prerequisites: PSYC 1503 Life Span Development II; PSYC 1669 Psychopathology I: Anxiety and Personality Disorders; PSYC 1670 Psychopathology II: Depressive, Bipolar and Schizophrenia Spectrum Disorders

**PSYC 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
Prerequisites: PSYC 1504 Research Methods and Design; PSYC 1510 Statistics I

**PSYC 1681 Dissertation Development**
This course focuses on the initial development of the Dissertation proposal. Students identify an area of clinical or empirical interest and develop a related focus of study for the Dissertation. Students receive guidance from their chair and members of Dissertation committee.
1 credit
Prerequisites: PSYC 1504 Research Methods and Design; PSYC 1510 Statistics I; Approval of Program Director

**PSYC 1682, 1684, 1686 Diagnostic Practicum I, II, III**
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. Each course 3 credits
Prerequisites: Approval of Director of Training, Academic Review Committee, and Program Director; Concurrent enrollment in PSYC 1683, 1685, or 1687 Diagnostic Practicum Seminar I, II, or III, respectively

**PSYC 1683, 1685, 1687 Diagnostic Practicum Seminar I, II, III**
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 a typical clinical setting. Each course 2 credits
Prerequisites: Approval of Director of Training, Academic Review Committee, and Program Director; Concurrent enrollment in PSYC 1682, 1684, or 1686 Diagnostic Practicum I, II, or III, respectively

**PSYC 1705 Systems Theory**
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: PSYC 1502 Life Span Development I; PSYC 1503 Life Span Development II; PSYC 1530 Introduction to Psychotherapy

**PSYC 1708 Advanced Ethics**
Using a case-based format, 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
Prerequisites: PSYC 1501 Professional Issues and Ethics

**PSYC 1710 Diversity in Clinical Psychology**
Using a biopsychosocial model, this course examines the impact of culture, race, ethnicity, gender, 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, 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
Prerequisites: PSYC 1654 Social and Cultural Bases of Behavior

**PSYC 1722 Professional Development and Lifelong Learning**
This course addresses students’ professional development. Problem-solving exercises nurture students’ metacognitive abilities. Issues, problems, values, and beliefs are the point of entry to a subject and source of motivation for sustained inquiry. This course is taken during summer quarter prior to the student beginning their advanced practicum.
1 credit
Prerequisites: PSYC 1501 Professional Issues and Ethics; Approval of the Director of Training

**PSYC 1730 Advanced Psychotherapy Practice**
This course is designed to help students develop a personal approach to psychotherapy practice, based upon their training in theoretical models and treatment, and their individual personalities. The course focuses on using the student’s theoretical model to conceptualize client cases and to provide appropriate treatment modalities while considering significant biopsychosocial and diversity factors. Case management and ongoing evaluation are discussed.
3 credits
Prerequisites: PSYC 1631 Cognitive Behavioral Theories and Approaches to Psychotherapy; PSYC 1632 Psychodynamic Approaches to Psychotherapy; PSYC 1636 Behavior Therapy

**PSYC 1731 Supervision and Consultation**
This course examines the consultative and supervisory processes and reviews the pertinent theories and practice models for supervision and consultation in a variety of employment settings.
3 credits

**PSYC 1746 Advanced Social-Cultural Bases of Behavior**
This course continues to the review the role of societal and environmental factors in the production and maintenance of human behavior. Socio-cultural individual differences are discussed in the context of diversity issues.
3 credits
Prerequisites: PSYC 1654 Social and Cultural Bases of Behavior

**PSYC 1760 Cognitive-Affective Bases of Behavior II**
This is an expanded discussion of topics related to the cognitive-affective bases of behavior. Specific cognitive activities such as learning, perception, memory, mental representations and effective development are reviewed. In addition, the roles of motivation and emotion in behavior are discussed.
3 credits
Prerequisites: PSYC 1660 Cognitive-Affective Bases of Behavior I

**PSYC 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: PSYC 1550 Biological Bases of Behavior

**PSYC 1771 Advanced Psychopathology**
This advanced course focuses on the clinical manifestations of psychopathology in children, adolescents, and adults as identified in empirical clinical research. The course examines the major differences noted for cultural groups, gender, and
persons with disabilities. The wide range of disorders presented in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V) are reviewed in the context of current research studies.

3 credits
Prerequisites: PSYC 1669 Psychopathology I: Anxiety and Personality Disorders; PSYC 1670 Psychopathology II: Depressive, Bipolar and Schizophrenia Spectrum Disorders; PSYC 1671 Child Psychopathology; PSYC 1680 Research Seminar: Integration of Science and Practice; PSYC 1710 Diversity in Clinical Psychology

**PSYC 1776 Health Psychology**
This course explores the relationship between stress, health and illness. Implementing a biopsychosocial approach, health factors are assessed for the severity and recovery from illness. Health maintenance behaviors and the role of psychologists on a multidisciplinary health team are addressed.

3 credits
Prerequisites: PSYC 1550 Biological Bases of Behavior

**PSYC 1781 Dissertation Seminar**
This seminar-based course focuses on the preparation for the completion and oral defense of the Dissertation proposal. All aspects of the Dissertation are reviewed. Students receive consultation from their Dissertation chair and committee.

1 credit
Prerequisites: PSYC 1680 Research Seminar: Integration of Science and Practice; PSYC 1681 Dissertation Development

**PSYC 1782, 1784, 1786 Therapy Practicum I, II, III**
The therapy practicum sequence involves direct clinical experiences at an approved training location. Students are enrolled while completing the required therapy practicum.

Each course 3 credits
Prerequisites: PSYC 1682, 1684, 1686 Diagnostic Practicum I, II, III; Concurrent enrollment in PSYC 1783, 1785, or 1787 Therapy Practicum Seminar I, II, or III, respectively; Approval of Director of Training, Academic Review Committee, and Program Director

**PSYC 1783, 1785, 1787 Therapy Practicum Seminar I, II, III**
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.

Each course 1 credit
Prerequisites: PSYC 1683, 1685, 1687 Diagnostic Practicum Seminar I, II, III; Concurrent enrollment in PSYC 1782, 1784, or 1786 Therapy Practicum I, II, or III, respectively; Approval of Director of Training, Academic Review Committee, and Program Director

**PSYC 1811, 1812, 1813, 1814 Dissertation I, II, III, IV**
Completion of the Dissertation during fourth year of 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 2-4 credits
Prerequisites: PSYC 1781 Dissertation Seminar; Approval of Program Director

**PSYC 1882, 1884, 1886 Advanced Practicum I, II, III**
The advanced practicum involves the direct clinical experiences at an approved training location. Students are enrolled while completing the required advanced practicum.

3 credits each course
Prerequisites: PSYC 1782, 1784, 1786 Therapy Practicum I, II, III; Concurrent enrollment in PSYC 1883, 1885, or 1887 Advanced Practicum Seminar I, II, or III, respectively; Approval of Director of Training, Academic Review Committee, and Program Director

**PSYC 1883, 1885, 1887 Advanced Practicum Seminar I, II, II**
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.

1 credit each course
Prerequisites: PSYC 1783, 1785, 1787 Therapy Practicum Seminar I, II, III; Concurrent enrollment in PSYC 1882, 1884, or 1886 Advanced Practicum I, II, or III, respectively; Approval of Director of Training, Academic Review Committee, and Program Director

**PSYC 1900, 1901, 1902, 1903 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. (50 credits total.)

Each course 12.5 credits
Prerequisites: PSYC 1582, 1583 Clerkship I, II; PSYC 1682, 1684, 1686 Diagnostic Practicum I, II, III; PSYC 1782, 1784, 1786 Therapy Practicum I, II, III; PSYC 1882, 1884, 1886 Advanced Practicum I, II, III; Successful completion of all coursework, Dissertation proposal, and Qualifying Examination; Approval of Program Director and Director of Training

**PSYC 1910-1913 Internship Continuation**
This course is reserved for students requiring additional time for completing internship requirements beyond the initial term of the internship. A continuation fee is assessed for enrollment in this course. The fee increases in the third continuation quarter and beyond.

Each course 0.5 credits
Prerequisites: PSYC 1900 Internship; Approval of Program Director and Director of Training

PSYC 1921, 1922, 1923, 1924 Dissertation Continuation I, II, III, IV
This course sequence is reserved for students on internship needing additional time for completion of the required Dissertation.
Each course 0.5 credits
Prerequisites: PSYC 1814 Dissertation IV; Concurrent enrollment in PSYC 1900, 1901, 1902, or 1903 Internship; Approval of Program Director

PSYC 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 credit
Prerequisites: Approval of Program Director

**Electives**

**PSYC 1332 Theories of Counseling and Psychotherapy**
This course provides an extensive review of the theories and models forming the foundation and rationale for counseling and psychotherapy. The content expands upon previous coursework to include counseling techniques and psychotherapies associated with Adlerian, analytical, existential, reality, family, person-centered, multicultural, and multimodal approaches. A minimum enrollment of 5 students is required for this course to be offered.
3 credits
Prerequisites: PSYC 1530 Introduction to Psychotherapy

**PSYC 1338 Theories of Vocational Counseling**
This course reviews the significant theories associated with vocational counseling including prominent career counseling models. Career counseling in schools, institutions of higher learning, and other work settings are reviewed. Issues affecting culture, gender, and special populations will be addressed. A minimum enrollment of 5 students is required for this course to be offered.
3 credits
Prerequisites: PSYC 1516 Tests and Measurements II

**PSYC 1437 Career Guidance and Counseling**
This course focuses on the significant aspects of psychological assessment and counseling techniques that are used in the process of career formation and guidance. Procedures for effective assessment and counseling techniques are considered in the context of diversity issues. The use of decision trees, career counseling checklists, and multicultural career assessment and counseling issues are discussed. A minimum enrollment of 5 students is required for course to be offered.
3 credits
Prerequisites: PSYC 1338 Theories of Vocational Counseling

**PSYC 1447 Advanced Group Therapy and Counseling**
This course is an advanced study of the techniques associated with group counseling therapy. The course explores appropriate group interventions for a variety of life situations, emotional concerns, health care needs, and psychiatric conditions. This course examines the uses of group techniques for diverse populations. A minimum enrollment of 5 students is required for this course to be offered.
3 credits

**PSYC 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
Prerequisites: Approval of Program Director

**PSYC 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
Prerequisites: Approval of Program Director

**PSYC 1639 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. Minimum enrollment of 5 students.
3 credits
Prerequisites: PSYC 1530 Introduction to Psychotherapy

**PSYC 1645 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. Minimum enrollment of 5 students.
3 credits
Prerequisites: PSYC 1530 Introduction to Psychotherapy

**PSYC 1647 Group Dynamics: Applied Therapy and Counseling Techniques**
Based on the historic and contemporary use of group counseling techniques, this course uses both didactic and experiential methods in introducing the students to the use and understanding of group dynamics and techniques. Students will learn not only the theoretical basis of group therapy, but will also be exposed to counseling applications appropriate for diverse populations. Minimum enrollment of 5 students.
3 credits
Prerequisites: PSYC 1530 Introduction to Psychotherapy; PSYC 1654 Social and Cultural Bases of Behavior

**PSYC 1740 Advanced Issues in Substance Abuse**
This course provides an extended examination of chemical dependence and other addictive behaviors begun in PSYC 1639. Major theories of etiology, dynamics, and psychopathology of substance abuse are critically reviewed. Assessment, treatment, and case management are explored within the context of diversity issues and the biopsychosocial perspective.
3 credits
Prerequisites: PSYC 1639 Counseling Modalities & Chemical Dependency

**PSYC 1775 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, aphasias, seizure disorders, arteriovenous malformations, and neurotoxic disorders.
3 credits
Prerequisites: PSYC 1550 Biological Bases of Behavior

**PSYC 1790 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.
3 credits
Prerequisites: PSYC 1501 Professional Issues and Ethics

**PSYC 1792 Family Therapy and Counseling**
This course will focus on the multidimensional nature of family treatment. Family dynamics and behavior will be addressed using systemic, dynamic and Cognitive Behavioral Therapy perspectives. Assessment, conceptualization, treatment planning, implementation, and evaluation of treatment will be described and discussed.
3 credits
Prerequisites: PSYC 1705 Systems Theory

**PSYC 1794 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
Prerequisites: Approval of Program Director

**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 Clinical Psychology 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 will lead to referral to the Program’s 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, as well as policies and procedures published in the Clinical Psychology Program Student Handbook and the Clinical Psychology Program Training Manual. Students are provided oral and written feedback about their progress periodically throughout the year.

**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.
If a student fails a Psy.D. course, the student may be required by the Program’s 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 by the Clinical Psychology Academic Review Committee and will be addressed accordingly in conjunction with the College of Health Sciences (CHS) academic policies.

In addition to academic grades, competency checkpoints are assessed throughout the program related to the specific training competency areas of the practitioner scientist model of training. 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 (See Program-Based Competencies section for additional information).

To progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

Program-Based Competencies
As mentioned, students are required to demonstrate evidence of competency throughout the program related to the specific training areas of the practitioner-scholar model of training. Satisfactory performance on each program-based competency is required (equivalent of at least a B- on a graded exam or P on a Pass/Fail exam). If a student does not perform satisfactorily on a program based competency, one retest for that competency may 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 program-based competencies will be addressed accordingly in conjunction with the College of Health Sciences (CHS) academic policies.

Successful completion of the Qualifying Examination and satisfactory progress in 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 Academic Review Committee and may result in dismissal from the program.

Qualifying Examination
The purpose of the Qualifying Examination is to permit students to demonstrate their 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. It is one of multiple criteria for the student’s advancement to doctoral candidacy. The examination is given annually and is scheduled after the first two years of study with the approval of the Academic Review Committee and the Program Director. It is evaluated on a Pass/Fail basis.

Students failing the Qualifying Examination will be offered 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. To progress to the next quarter, a student must satisfactorily complete all academic requirements for the preceding quarter.

Satisfactory performance on any program-based competency is required (equivalent of at least a 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. 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 P on a Pass/Fail exam. 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.

Failures in courses containing these program-based competencies will be addressed by the 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 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 one through six listed above signals the official acceptance of the matriculated student as a doctoral candidate.
referral to the Academic Review Committee and possible
dismissal from the program.

FACULTY

Esperanza M. Anaya, Ph.D.
Indiana University
Assistant Professor

Karen E. Farrell, Psy.D., ABPP
Argosy University
Illinois School of Professional Psychology
Director of Training and Professor

Arthur Freeman, Ed.D., Sc.D., ABPP
Babes-Bolyai University
International Institute for the Advanced Studies of
Psychotherapy and Applied Mental Health
Executive Program Director and Professor

Sarah E. Getch, Ph.D.
Illinois Institute of Technology
College of Psychology
Assistant Professor

Nathaniel D. Krumdick, Ph.D., IABMCPI
Loyola University of Chicago
The Graduate School
Assistant Professor

Michelle M. Lee, Ph.D., ABPP
Case Western Reserve University
School of Graduate Studies
College of Arts and Sciences
Professor

Richard C. Ney, Ph.D., ABPP
Loyola University of Chicago
The Graduate School
Associate Program Director, Director of Admissions, and
Professor

Ann M. Sauer, Ph.D., ABPP
Loyola University of Chicago
The Graduate School
Associate Professor

Diana J. Semmelhack, Psy.D., ABPP
Argosy University
Illinois School of Professional Psychology
Professor

Ja’net M. Seward, Psy.D., ABPP
Argosy University
Illinois School of Professional Psychology
Assistant Professor
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
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
The Master of Science in Speech-Language Pathology (SLP) Program at Midwestern University (MWU) has been granted candidacy for accreditation by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association (ASHA) located at 2200 Research Blvd., Rockville, MD 20850-3289; Phone: 301-296-5700. This "pre-accreditation" status with the CAA is awarded to qualified new programs for a maximum period of five years.

Students attending the MWU SLP Program are afforded the same benefits as those attending any accredited program.

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 may alternatively elect to pursue a capstone non-thesis track. 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, 2015 in order to be considered (http://www.capcsd.org/cidcas). 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.

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
   - Articulation Development
   - Language Development
   - Speech and Hearing Science
   - Introduction to Audiology
   - 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. Oral and written communication skills necessary to interact with patients and colleagues.
5. 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, 2010
   - For more information about the GRE contact Educational Testing Services (ETS) at 866/473-4373 or visit www.ets.org/gre
6. Two letters of recommendation from individuals who can comment on academic, clinical, and professional experiences of the applicant.
7. A completed CSDCAS application.
8. An interview with faculty (invitation only).
9. During the on-campus interview day, write an essay given a clinical writing prompt (for interview candidates only).
10. Commitment to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
11. Passage of the Midwestern University criminal background check.
12. Proof of CPR certification through completion of a healthcare provider course certified by the American Heart Association.

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

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, 2015. 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, 2010) 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
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. 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 and interpret 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 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 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 certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the College Dean and Program Director, will identify and discuss what accommodations, if any, the College (/Program) would need to make that would allow the candidate to complete the curriculum. The College (/Program) 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.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.

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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

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 graduation, 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 110 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.

**CURRICULUM**

The professional master’s curriculum is composed of 54 required course credits (quarter hours) for the first academic year, 56 to 57 required course credits for the second academic year for a total of 110 to 111 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.

**First Professional Year**

**Total Credit Hours Required** 54

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPI 0501</td>
<td>Neurological Bases of Communication Disorders</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0502</td>
<td>Research Methods in Communication Sciences and Disorders</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0503</td>
<td>Evidence-Based Practice in Communication Sciences and Disorders</td>
<td>2</td>
</tr>
<tr>
<td>SLPI 0520</td>
<td>Disorders of Articulation and Phonology</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0540</td>
<td>Clinical Methods in Speech-Language Pathology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPI 0501</td>
<td>Neurological Bases of Communication Disorders</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0511</td>
<td>Thesis I</td>
<td>2</td>
</tr>
<tr>
<td>SLPI 0521</td>
<td>Child Language Disorders I</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0526</td>
<td>Adult Language and Cognitive Disorders I</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0529</td>
<td>Voice and Resonance Disorders</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPI 0506</td>
<td>Capstone II</td>
<td>1</td>
</tr>
<tr>
<td>SLPI 0512</td>
<td>Thesis II</td>
<td>1</td>
</tr>
<tr>
<td>SLPI 0522</td>
<td>Child Language Disorders II</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0525</td>
<td>Dysphagia I</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0527</td>
<td>Adult Language and Cognitive Disorders II</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0552</td>
<td>Clinical Practicum II</td>
<td>3</td>
</tr>
<tr>
<td>SLPI 0553</td>
<td>Practicum Seminar II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

**Second Professional Year**

**Total Credit Hours Required** 56-57

**Summer Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPI 0607</td>
<td>Capstone III</td>
<td>1</td>
</tr>
<tr>
<td>SLPI 0613</td>
<td>Thesis III 1</td>
<td>1</td>
</tr>
<tr>
<td>SLPI 0623</td>
<td>Communication Disorders in Autism</td>
<td>3</td>
</tr>
<tr>
<td>SLPI 0631</td>
<td>Augmentative and Alternative Communication</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0632</td>
<td>Dysphagia II</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0654</td>
<td>Clinical Practicum III</td>
<td>3</td>
</tr>
<tr>
<td>SLPI 0665</td>
<td>Practicum Seminar III</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPI 0604</td>
<td>Professional Issues and Ethics in Speech-Language Pathology</td>
<td>2</td>
</tr>
<tr>
<td>SLPI 0614</td>
<td>Thesis IV</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thesis track only</td>
<td></td>
</tr>
<tr>
<td>SLPI 0624</td>
<td>Aural Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>SLPI 0628</td>
<td>Motor Speech Disorders</td>
<td>4</td>
</tr>
<tr>
<td>SLPI 0630</td>
<td>Fluency Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SLPI 0656</td>
<td>Clinical Practicum IV</td>
<td>3</td>
</tr>
</tbody>
</table>

192
SLPI 0657 Practicum Seminar IV 1
Total 16-17

Winter Quarter
SLPI 0660 Advanced Practicum in Speech-Language Pathology: Public School 10
AND
SLPI 0661 Advanced Practicum Seminar I 2
OR
SLPI 0662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility 10
AND
SLPI 0663 Advanced Practicum Seminar II 2
Total 12

Spring Quarter
SLPI 0660 Advanced Practicum in Speech-Language Pathology: Public School 10
AND
SLPI 0661 Advanced Practicum Seminar I 2
OR
SLPI 0662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility 10
AND
SLPI 0663 Advanced Practicum Seminar II 2
Total 12

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.

CORE 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

SLPI 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

SLPI 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

SLPI 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.
2 credits

SLPI 0520 Disorders of Articulation and Phonology
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

SLPI 0521 Child Language Disorders I
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

**SLPI 0522 Child Language Disorders II**
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
Prerequisites: SLPI 0521 Child Language Disorders I

**SLPI 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
Prerequisites: SLPI 0501 Neurological Bases of Communication Disorders

**SLPI 0526 Adult Language and Cognitive Disorders I**
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
Prerequisites: SLPI 0501 Neurological Bases of Communication Disorders

**SLPI 0527 Adult Language and Cognitive Disorders II**
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
Prerequisites: SLPI 0501 Neurological Bases of Communication Disorders; SLPI 0526 Adult Language and Cognitive Disorders I

**SLPI 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
Prerequisites: SLPI 0501 Neurological Bases of Communication Disorders

**SLPI 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.
4 credits

**SLPI 0550 Clinical Practicum I**
This is the first supervised speech-language pathology practicum experience in the Midwestern University Clinic or other community-based site. Working with a faculty member who is a licensed speech-language pathologist, students will plan and conduct assessment and intervention sessions for clients with communication disorders. First clinical experiences are targeted toward management of individuals with articulation, phonology, or language disorders.
3 credits

**SLPI 0551 Practicum Seminar I**
This seminar provides an opportunity for students to discuss practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases to attendees in grand rounds fashion, at times including participants from other health science professions. Essential functions for clinical performance will be covered, in addition to standards for ethical practice.
1 credit
Prerequisites: Concurrent enrollment in SLPI 0550 Clinical Practicum I

**SLPI 0552 Clinical Practicum II**
This is the second supervised speech-language pathology practicum experience at the Midwestern University clinic or
other community-based site. Working with a faculty member who is a licensed speech-language pathologist, students will plan and conduct assessment and intervention sessions for clients with communication disorders. Clinical experiences are targeted toward management of individuals with a variety of communication disorders, including articulation, language, fluency, voice, or multiple disorders.

3 credits
Prerequisites: SLPI 0550 Clinical Practicum I

SLPI 0553 Practicum Seminar II
This seminar provides an opportunity for students to discuss practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases to attendees in grand rounds fashion, at times including participants from other health science professions. Working independently and as a member of an interdisciplinary team will be explored.

1 credit
Prerequisites: Concurrent enrollment in SLP 0552 Clinical Practicum II

SLPI 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

SLPI 0623 Communication Disorders in Autism
This course provides insight into the world of autism, including description of the various autism spectrum disorders and examination of etiological theories and controversies. Procedures used for differential diagnosis of autism spectrum disorders are covered, and a variety of intervention models will be discussed. The role of the SLP in working with educators and families will be addressed. Students will design comprehensive assessment and intervention plans for persons of all ages with autism.

3 credits
Prerequisites: SLPI 0521 Child Language Disorders I, SLPI 0522 Child Language Disorders II

SLPI 0624 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.

3 credits

SLPI 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.

4 credits
Prerequisites: SLPI 0501 Neurological Bases of Communication Disorders; SLP 0520 Disorders of Articulation and Phonology; SLPI 0529 Voice and Resonance Disorders

SLPI 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

SLPI 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.

4 credits

SLPI 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 videoflouroscopic and endoscopic swallowing assessments will assist students in profiling phase-specific sensory and motor swallowing abnormalities. Complex cases will be addressed.

4 credits
Prerequisites: SLPI 0525 Dysphagia I
SLPI 0654 Clinical Practicum III
This is the third supervised speech-language pathology practicum experience at the Midwestern University Clinic or other community-based site. Working with a faculty member who is a licensed speech-language pathologist, students will plan and conduct assessment and intervention sessions for clients with communication disorders. Clinical experiences are targeted toward management of individuals with a variety of communication disorders, including articulation, language, fluency, voice, or multiple disorders. Diagnostic evaluation will be emphasized in this experience.
3 credits
Prerequisites: SLPI 0550 Clinical Practicum I; SLPI 0552 Clinical Practicum II

SLPI 0655 Practicum Seminar III
This seminar provides an opportunity for students to discuss practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases to attendees in grand rounds fashion, at times including participants from other health science professions. Addressing the needs of complex cases will be one focus of this seminar.
1 credit
Prerequisites: Concurrent enrollment in SLPI 0654 Practicum III

SLPI 0656 Clinical Practicum IV
This is the last of four supervised speech-language pathology practicum experiences at the Midwestern University Clinic or other community-based sites. Working with a faculty member who is a licensed speech-language pathologist, students will plan and conduct assessment and intervention sessions for clients with communication disorders. Clinical experiences are targeted toward evaluation and management of complex cases.
3 credits
Prerequisites: SLPI 0550 Clinical Practicum I; SLPI 0552 Clinical Practicum II; SLPI 0654 Clinical Practicum III

SLPI 0657 Practicum Seminar IV
This seminar provides an opportunity for students to discuss practicum experiences with other student clinicians to foster collaboration. Students will present clinical cases to attendees in grand rounds fashion, at times including participants from other health science professions. Continuing to learn how to address the needs of complex cases will be the focus of this seminar.
1 credit
Prerequisites: Concurrent enrollment in SLPI 0656 Clinical Practicum IV

SLPI 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 10 week, full-time school site placement. May be taken before or after SLPI 0662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility.
10 credits

SLPI 0661 Advanced Practicum Seminar I
This seminar is designed to assist students in the successful completion of their public school internships. Students will meet to discuss training experiences and present clinical cases to attendees.
2 credits
Prerequisites: Concurrent enrollment in SLPI 0660 Advanced Practicum in Speech-Language Pathology: Public School

SLPI 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 10 week, full-time clinical site placement. Note: May be taken before or after SLPI 0660 Advanced Practicum in Speech-Language Pathology: Public School.
10 credits

SLPI 0663 Advanced Practicum Seminar II
This seminar reviews the progress of students serving healthcare internships. Students will meet to discuss training experiences and present clinical cases to attendees.
2 credits
Prerequisites: Concurrent registration in SLPI 0662 Advanced Practicum in Speech-Language Pathology: Medical/Healthcare Facility

Elective Course Descriptions

SLPI 0505 Capstone I
This course is required for any student not electing the thesis track. It will include a one-hour class meeting in which students will brainstorm research ideas, develop research questions or other creative projects, and work together to plan projects. It will also include a one-hour meeting with a faculty research mentor to design an appropriate research-based capstone project. By the end of this quarter, students should have part of their capstone project complete, as agreed upon by their faculty research mentor. Students should have designed an appropriate study and some will begin data collection this term.
2 credits
Prerequisites: SLPI 0502 Research Methods in Communication Sciences and Disorders; SLPI 0503 Evidence-Based Practice in Communication Sciences and Disorders
SLPI 0506 Capstone II
This course is required for all capstone-track students. Students will complete data collection and analysis this term. They will begin preparation of a research document or creative project to demonstrate their results.
1 credit
Prerequisites: SLPI 0505 Capstone I

SLPI 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
Prerequisites: SLPI 0502 Research Methods in Communication Sciences and Disorders; SLPI 0503 Evidence-Based Practice in Communication Sciences and Disorders

SLPI 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
Prerequisites: SLPI 0511 Thesis I

SLPI 0607 Capstone III
This course is required for all capstone-track students. Working with their faculty research mentor, students will complete their capstone project this term. This will involve data analysis and preparation of a research document or creative project. Students will present their findings in poster form at a program-sponsored research seminar at the end of the term.
1 credit
Prerequisites: SLPI 0506 Capstone II

SLPI 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
Prerequisites: SLPI 0512 Thesis II

SLPI 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
Prerequisites: SLPI 0613 Thesis III

SLPI 0670, 0671, 0672, 0673 Thesis Continuation I-IV
These courses are reserved for SLPI students needing additional time to complete and successfully defend their thesis project. Enrollment is necessary only when students have completed other program requirements, and will not be enrolled in other courses. This is considered an extension of the thesis and must be approved by the Program Director. A fee is assessed with enrollment in these courses.
0.5 credit each course
Prerequisites: SLPI 0614 Thesis IV

SLPI 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
Prerequisites: Permission of the Instructor

FACULTY
Megan E. Cuellar, Ph.D., CCC-SLP
University of Memphis
Assistant Professor

Patricia J. Gibbons, M.A., CCC-SLP
Northwestern University
Assistant Professor

Kimberly S. Hoffer, M.A., CCC-SLP
Northwestern University
Director of Clinical Education and Assistant Professor

Jayne Jaskolski, Ph.D., CCC-SLP
Cardinal Stritch University
Assistant Professor

Elia Olivares, M.S., CCC-SLP
Illinois State University
Clinical Assistant Professor

Kathleen Post, M.S., CCC-SLP
University of Wisconsin-Stevens Point
Clinical Assistant Professor

SLP Clinic Coordinator
Christina del Toro, Ph.D., CCC-SLP
University of Florida
Assistant Professor

Tina K. Veale, Ph.D., CCC-SLP
University of Cincinnati
Program Director and Professor

Jonathan P. Wilson, Ph.D., CCC-SLP
University of Florida
Assistant Professor
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
The College of Dental Medicine-Illinois aspires to be a global leader in oral healthcare education through its commitment to:

• Patient-centered, interprofessional healthcare founded on the principles of ethical practice, scientific research, and evidence-based decision making
• The integration of biomedical and clinical sciences across all disciplines
• Engagement in collaborative research and scholarly activity for the improvement of oral health
• The promotion of diversity among its students, patients, staff, and faculty
• The graduation of highly qualified, empathetic oral healthcare professionals who address the needs of society and possess the knowledge, skills, judgment, and respect for patients that is essential for independent ethical practice

CORE VALUES
The College of Dental Medicine-Illinois will achieve its mission and vision through emphasis on the following Goals:

1. Develop innovative educational programs that prepare students for ethical clinical practice of the highest quality.
2. Create a humanistic learning environment based upon collegiality and professionalism, modeled by faculty in an atmosphere of cooperation, teamwork, shared knowledge, and mutual respect.
3. Provide a patient-centered, comprehensive care program that considers the overall well-being of the patient.
4. In cooperation with the Midwestern University colleges and programs, develop an interprofessional model of learning and practice that will prepare practitioners for the healthcare team of the future.
5. Create an environment of diversity that is valued and visible among the students, staff, faculty, and patients.
6. Encourage lifelong learning based on science, evidence, and critical thinking that emphasizes continuous professional development and change.
7. Promote scholarly achievement and research that emphasizes the development of new knowledge in education, learning, and healthcare delivery.
8. Demonstrate leadership in oral health care among students, staff, and faculty through integrity, innovation, responsibility, and service to the community.

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 “initial accreditation.” 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/A Commission of the North Central Association of Colleges and Schools (HLC/NCA), 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 4 academic years. The curriculum consists of 2 years of primarily didactic and preclinical instruction with clinical introductory experiences followed by 2 years of primarily clinical experiences and rotations including the applicable didactic material. Upon graduation with the D.M.D. degree, the graduate is eligible to sit for board licensing examinations in the USA and Canada. The graduate is also eligible for postdoctoral residency training in all fields of dentistry.
ADMISSIONS
The Midwestern University College of Dental Medicine-Illinois (CDMI) 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 eligible for enrollment, an applicant must earn a bachelor’s degree from a regionally accredited college or university and must possess a science and cumulative GPA over 2.75 (although 3.20 will generally be competitively necessary) on a 4.00 scale. A minimum biology/chemistry/physics (BCP) science and cumulative GPA of 2.75 on a 4.00 scale, as calculated by AADSAS, is required to receive a supplemental application. A bachelor’s degree must be completed before starting the program.

Prerequisite Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>General Chemistry with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>Organic Chemistry with lab</td>
<td>4 Semester/6 Quarter hours</td>
</tr>
<tr>
<td>Anatomy</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>Microbiology</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>Physics with lab</td>
<td>8 Semester/12 Quarter hours</td>
</tr>
<tr>
<td>Physiology</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>3 Semester/4 Quarter hours</td>
</tr>
<tr>
<td>English Composition/Technical Writing</td>
<td>6 Semester/9 Quarter hours</td>
</tr>
</tbody>
</table>

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

No grade lower than a C will be accepted for any prerequisite courses (i.e., a grade of C- will not be acceptable).

1. Completion of a bachelor’s degree from a regionally accredited college or university prior to matriculation.
2. Completion of the prerequisite coursework.
   - Grades of C or better (grades of C- are not acceptable
   - To receive a supplemental application, students must have minimum cumulative and BCP science GPAs of 2.75 on a 4.00 scale, as calculated by AADSAS
3. Competitive exam scores on the Dental Aptitude Test (DAT).
   - Scores on the DAT must be submitted directly to AADSAS
   - Scores in the area of 18 or higher will be expected for the Academic Average, Reading Comprehension, and Perceptual Ability section
   - Only DAT exam scores earned from tests taken no more than 3 years prior to matriculation are acceptable
4. Two letters of recommendation.
   - One must be from either a predental advisory committee or a science professor
   - The CDMI prefers other letters from either someone with a D.O./M.D. or D.D.S./D.M.D. degree and/or professionals who can testify to the integrity and ethical standards of the applicant
   - Letters written by immediate family members are not acceptable
   - All letters of evaluation must be submitted directly by the evaluators to AADSAS
5. Demonstration of a sincere understanding of, and interest in, the humanitarian ethos of healthcare and particularly dental medicine.
6. Demonstration of a people or service orientation through community service or extracurricular activities.
7. Motivation for and commitment to health care as demonstrated by previous salaried work, volunteer work, or other life experiences.
8. Oral and written communication skills necessary to interact with patients and colleagues.
9. Agreement to abide by the Midwestern University Drug-Free Workplace and Substance Abuse Policy.
10. Passing the Midwestern University fingerprinting and criminal background check.
    - Applicants will be subject to a criminal background check. The results of the background check are reviewed by the Dean of Students to determine whether there is a record of misdemeanor or felony convictions. If there is a positive record, the Dean of Students will inform the appropriate Academic Dean and the University’s Director of Risk Management to determine 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.
Competitive Admissions
Within its 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 Aptitude 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.

International Applicants
Note: The Canadian DAT can be substituted for the U.S. DAT. All sections of the Canadian DAT are required.

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 transfer 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 or Fax 414/289-3411 (www.ece.org, e-mail: eval@ece.org)
- World Education Service (WES): 212/966-6311 or Fax 212/739-6100 (www.wes.org)
- Josef Silny & Associates International Education Consultants: 305/273-1616 or Fax 305/273-1338 (www.jsilny.com, e-mail: info@jsilny.com)

International applicants who do not provide documentation of acceptable US 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.

Application Process and Deadlines
Prospective applicants should submit all of their required application materials as early as possible. The College of Dental Medicine-Illinois uses a two-step application process. Applicants must submit both a completed AADSAS application and an MWU supplemental application.

1. AADSAS Application: To initiate the application process, all applicants must apply online via the AADSAS centralized application service at https://portal.aadsasweb.org. The AADSAS application is typically available in June. Please refer to the AADSAS instructions for specific application requirements and procedures. The deadline for submission of the AADSAS application with all required application materials is January 1.
2. DAT Scores: Applicants must arrange for scores from the DAT to be sent directly to AADSAS. Only official test scores earned within three years prior to matriculation and received directly from AADSAS are acceptable.
3. Letters of Recommendation: Applicants must submit two letters of recommendation from academic sources and professionals to AADSAS. The Office of Admissions will only accept letters of recommendation received directly from AADSAS. Letters sent directly to the Office of Admissions will not be accepted. Please refer to the AADSAS application instructions for specific guidelines and requirements for submitting letters of recommendation. The letters must be received by the Office of Admissions from AADSAS on or before March 1.
4. Supplemental Application: After receiving AADSAS applications from the application service, the Office of Admissions will email supplemental applications to all applicants who meet the minimum cumulative and BCP science GPA requirements of 2.75 on a 4.00 scale, as calculated by AADSAS. Applicants must complete and submit their supplemental applications with the required information and their application fee to the Office of Admissions on or before March 1.
5. Completed Applications: All application materials, including the AADSAS application, official DAT scores (as reported to AADSAS), two letters of recommendation (as submitted to AADSAS), and
supplemental application materials with the application fee must be received in the Office of Admission on or before March 1. 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 the 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 or 800/458-6253
admissil@midwestern.edu

Interview and Selection Process
After the Office of Admissions receives all of the required application materials, applicant files are reviewed to determine whether applicants merit interviews based on established criteria of the Admissions Committee. 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 an applicant accepts an invitation for an interview, he/she joins several other interviewees for a day on the CDMI campus. The Multiple Mini Interview (MMI) is utilized as the interview format. The MMI is a circuit of 6-8 timed independent interview stations. Each interview station is unique and chosen for its relevance for assessing a candidate’s overall acceptability for admission into the program. MMI interviewers are selected from a volunteer group of basic scientists, administrators, and dental faculty. At the conclusion of the interviews, MMI score sheets for each applicant are processed and forwarded to the Admissions Committee. The committee may recommend to accept applicants for admission, to deny admission, or to place applicants on either the hold or alternate list. Recommendations are then forwarded to the Dean for final approval. The Dean, via the Office of Admissions, notifies applicants of their status as soon as possible 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 late summer prior to matriculation and ends in March or April 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 College.

The following abilities and expectations must be met by all students admitted to the College with reasonable accommodation. A candidate must have abilities and skills in five areas: 1) observation; 2) communication; 3) motor; 4) conceptual, integrative, and quantitative; and 5) behavioral and social. Technological compensation can be made for some limitation in certain of these areas, but a candidate 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 with direct eye contact. The candidate must have sufficient facility with English to: retrieve information from texts and lectures and communicate concepts on written exams and patient charts and coordinate patient care with all members of the health care team.

3. Motor: The candidate 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. 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. The 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. The candidate
must be able to interrelate among colleagues, staff, and patients with honesty, integrity, respect, and nondiscrimination.

Candidates are required to certify that they understand and meet these Technical Standards. Candidates must provide such certification prior to matriculation. Candidates who may not meet the Technical Standards must inform the Director of Admissions, who will then contact the Dean of Students. The Dean of Students, in consultation with the Dean, will identify and discuss what accommodations, if any, the College would need to make that would allow the candidate to complete the curriculum. 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 in the College.

Matriculation Process
The matriculation process begins after students receive notification of their acceptance. To complete the matriculation process, students 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 I-20 visa or who are not U.S. citizens or permanent residents must prepay tuition and in some cases other mandatory program fees for the entire length of their program at Midwestern University.
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.

Students 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 receives no further notification from the college regarding the forfeiture of their seat.

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 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 provide an acceptable reason(s) for seeking transfer. Typically, transfers are only granted to students desiring to transfer between the second and third years of the dental program.

To be considered for transfer, students must meet the College’s general requirements for admission. Students must also observe the following transfer 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 must be returned to the Office of Admissions and must include transcripts from the previous dental school, class rank (must be in top 50%), a statement of the reason for transfer, a Dean’s letter verifying “Good Academic Standing,” and a letter of reference from the Dean of Students.
3. Completed applications are forwarded to the Dean.
4. The Dean reviews applications and conducts interviews with transfer applicants.
5. Applicants are notified by the Dean of final transfer admission decisions.
6. Students applying for transfer must not have been previously rejected for admission to the MWU-CDMI through the standard admissions process.

GRADUATION REQUIREMENTS
Students usually complete the Doctor of Dental Medicine (D.M.D.) degree in fifteen 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 2.0 and have no course grade below a "C" or "Pass";
3. Receive a favorable recommendation for conferral of the D.M.D. degree from the Student Academic Progress Committee, Clinical and the Dean of CDMI;
4. Be recommended for conferral of the D.M.D. degree by 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
Dental graduates of U.S. Dental Schools can obtain full practice rights in all 50 states as well as many foreign countries. To obtain licensure, dental clinicians 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 and the state accepts a certificate issued by a regional board of dental examiners (CRDTS, NERB, SRTA, WREB)
2. The state honors formal or informal reciprocity agreement with another state(s) or issues a license by credentialing the certificate from another state

Postdoctoral requirements vary among states. For further information concerning licensure, please contact the American Dental Association or the specific state’s licensing board.

CURRICULUM
The Midwestern University College of Dental Medicine-Illinois reserves the right to alter its curriculum whenever it deems appropriate.

Total Quarter Credits in the Professional Program: 274.5

First Professional Year:
Total Quarter Hours Required: 55

Fall Quarter
CORE 1599 Interprofessional Education I 1
DENT 1510 Oral Facial Complex in Health 8
IBSS 1501 Foundations of Cell Function for Dental Students 4.4
IBSS 1502 Genetics and Immunology for Dental Students 4.8
Total 18.2

Winter Quarter
DENT 1520 Risk Assessment, Diagnosis, and Preventive Care of Oral Diseases 9.5
IBSS 1503 Infectious Disease, Skin, and Blood Disorders for Dental Students 3.5
IBSS 1504 Neural and Musculoskeletal Systems for Dental Students 4.5
IBSS 1505 Cardiovascular System for Dental Students 2.9
FMED 1500 Healthcare Communication 1
Total 21.4

Spring Quarter
DENT 1530 Treatment Planning and Initial Therapeutic Interventions 8
IBSS 1506 Head and Neck Anatomy for Dental Students 3.3
IBSS 1507 Respiratory and Urogenital Systems for Dental Students 4.1
Total 15.4

Second Professional Year:
Total Quarter Credit Hours Required: 69.5

Summer Quarter
DENT 1610 Management of Complex Oral Conditions 8.2
IBSS 1608 Clinical Neuroscience for Dental Students 3.5
IBSS 1609 Endocrine and Reproductive Systems for Dental Students 2.5
Total 14.2

Fall Quarter
DENT 1620 Diagnosis and Rehabilitative Dentistry 11
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1625</td>
<td>Dental Pharmacotherapeutics (1.5 total CH, 0.5 in the Fall Quarter)</td>
<td>0.5</td>
</tr>
<tr>
<td>IBSS 1610</td>
<td>Gastrointestinal System for Dental Students</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 1640</td>
<td>Pharmacology for Dental Students (5.0 total CH, 2.0 in the Fall Quarter)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1625</td>
<td>Dental Pharmacotherapeutics (1.5 total CH, 1.0 in the Winter Quarter)</td>
<td>1</td>
</tr>
<tr>
<td>DENT 1630</td>
<td>Comprehensive Oral Healthcare</td>
<td>11</td>
</tr>
<tr>
<td>IBSS 1620</td>
<td>An American Family: Clinical Integration Course (6.0 total CH, 3.0 in the Winter Quarter)</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 1640</td>
<td>Pharmacology for Dental Students (5.0 total CH, 3.0 in the Winter Quarter)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>18.0</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1650</td>
<td>Oral Health Sciences 2.4</td>
<td>17.8</td>
</tr>
<tr>
<td>IBSS 1620</td>
<td>An American Family: Clinical Integration Course (6.0 total CH, 3.0 in the Spring Quarter)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20.8</strong></td>
</tr>
</tbody>
</table>

**Third Professional Year:**

Total Quarter Credit Hours Required: 76

**Summer Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1700</td>
<td>Patient Assessment and Diagnosis of Head and Neck Disorders</td>
<td>2</td>
</tr>
<tr>
<td>DENT 1710</td>
<td>Oral Health Sciences 3.1A</td>
<td>13.5</td>
</tr>
<tr>
<td>DENT 1711</td>
<td>Oral Health Sciences 3.1B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1777</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>18.5</strong></td>
</tr>
</tbody>
</table>

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1730</td>
<td>Oral Health Sciences 3.2A</td>
<td>13.5</td>
</tr>
<tr>
<td>DENT 1731</td>
<td>Oral Health Sciences 3.2B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1777</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1750</td>
<td>Oral Health Sciences 3.3A</td>
<td>13.5</td>
</tr>
<tr>
<td>DENT 1751</td>
<td>Oral Health Sciences 3.3B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1777</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1770</td>
<td>Oral Health Sciences 3.4A</td>
<td>13.5</td>
</tr>
<tr>
<td>DENT 1771</td>
<td>Oral Health Sciences 3.4B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1777</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Fourth Professional Year:**

*Only 25% of students will be registered in each quarter

Total Quarter Credit Hours Required: 74

**Summer Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1810</td>
<td>Oral Health Sciences 4.1A</td>
<td>12.5</td>
</tr>
<tr>
<td>DENT 1811</td>
<td>Oral Health Sciences 4.1B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1888</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
<tr>
<td>DENT 1890</td>
<td>Community Oral Health*</td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15.5</strong></td>
</tr>
</tbody>
</table>

**Fall Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1830</td>
<td>Oral Health Sciences 4.2A</td>
<td>12.5</td>
</tr>
<tr>
<td>DENT 1831</td>
<td>Oral Health Sciences 4.2B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1888</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
<tr>
<td>DENT 1890</td>
<td>Community Oral Health*</td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15.5</strong></td>
</tr>
</tbody>
</table>

**Winter Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1850</td>
<td>Oral Health Sciences 4.3A</td>
<td>12.5</td>
</tr>
<tr>
<td>DENT 1851</td>
<td>Oral Health Sciences 4.3B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1888</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
<tr>
<td>DENT 1890</td>
<td>Community Oral Health*</td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>15.5</strong></td>
</tr>
</tbody>
</table>

**Spring Quarter**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 1870</td>
<td>Oral Health Sciences 4.4A</td>
<td>12.5</td>
</tr>
<tr>
<td>DENT 1871</td>
<td>Oral Health Sciences 4.4B</td>
<td>3</td>
</tr>
<tr>
<td>DENT 1888</td>
<td>Comprehensive Clinical Course</td>
<td>0-8</td>
</tr>
</tbody>
</table>
DENT 1890 Community Oral Health*  0-4  

**Total**  15.5  

**Electives**  
DENT 1501 Dental Research  6  
DENT 1899 Externship  0.1-0.2  

**Total**  

**SECTIONS**  
Organizationally, the College of Dental Medicine-Illinois is divided into two sections, Preclinical Dentistry and Clinical Dentistry.  

**COURSE DESCRIPTIONS**  
These descriptions are for new classes, some of which will be taught with new faculty not yet hired. Thus, there will likely be changes in content and course descriptions prior to the delivery of the courses.  

**Healthcare Issues**  
**CORE 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  

**Healthcare Communication**  
**FMED 1500 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**  
The Integrated Basic Science Sequence (IBSS) is an interdisciplinary sequence of 11 courses that presents the basic science foundation for the practice of dentistry. Didactic lectures covering the normal structure and function of cell and body systems and the relevant immunology, infectious disease and pathological disease processes are supplemented with active learning exercises in a small-group environment. The active learning exercises are designed to apply basic science concepts within a clinical scenario.  

**IBSS 1501 Foundations of Cell Function for Dental Students**  
IBSS 1501 spans three modules that cover cell structure and function; molecular biology of the cell and intermediary metabolism; and relevant cell pathology, and that serve as essential foundational material for the discussion of immunology and body systems which follow in future IBSS courses. Module 1: Cell Biology. The disciplines of histology, biochemistry, and physiology cover general cell structure and function. Topics include cell structure, metabolic fuels, cell transport mechanisms, signal transduction, osmosis and regulation of cell volume, and the cell cycle. Module 2: Molecular Biology and Metabolism. The molecular biology of the cell and intermediary metabolism are covered in this module, which is presented by the Biochemistry faculty. Topics include DNA repair and replication, transcription, translation, and control of gene expression, as well as the processes of carbohydrate, amino acid, triglyceride, lipoprotein and cholesterol synthesis and metabolism. Module 3: Epithelium/Connective Tissue/Blood. The disciplines of histology, biochemistry, and pathology cover the structure and function of epithelium, connective tissue and blood. Topics include cell and tissue structure and function, hematopoiesis, hemostasis, and mechanisms of cell adaptation, injury and death.  
4.4 credits  

**IBSS 1502 Genetics and Immunology for Dental Students**  
IBSS 1502 spans two modules that provide an overview of cancer, human genetics, the lymphatic system and immunology. Module 4: Genetics and Cancer. The disciplines of pathology and biochemistry present the fundamentals of human genetics, cancer and relevant genetic disorders. Topics include: molecular biology and pathology of cancer, genetic diseases, autosomal dominant and recessive, sex-linked, mitochondrial and multifactorial genetic disorders and diseases, cytogenetics and an introduction to genetic risk assessment. Module 5: Lymphatics/Immune System. The disciplines of gross anatomy, immunology, and pathology cover the basic structure and function of the lymphatic system and the composition and function of the immune response system. Topics include gross anatomy and histology of the lymphatic system, innate and adaptive immunity, hypersensitivity, inflammation, tissue repair, immune responses to infectious agents, transplantation immunology, autoimmune disease, immunodeficiency disorders and HIV/AIDS.  
4.8 credits
IBSS 1503 Infectious Disease, Skin, and Blood Disorders for Dental Students
IBSS 1503 spans two modules that present principles of infectious disease, followed by a discussion of skin and blood disorders and disease. Module 6: Introduction to Infectious Disease. Fundamentals of infectious disease are covered in this module, presented by the microbiology and immunology discipline. Topics include taxonomy, structure, identification and virulence determinants of infectious agents, and principles of infection control, antimicrobial agents and laboratory diagnostics. Module 7: Integument and Blood Disorders. The disciplines of microbiology, biochemistry, and pathology cover mechanisms and the clinical course of relevant integumentary and blood-borne disorders and disease. Topics include bacterial, fungal, viral, and other blood-borne pathogens, dermopathology, anemia, and red and white blood cell disorders.

IBSS 1506 Head and Neck Anatomy for Dental Students
IBSS 1506 provides a detailed study of head and neck anatomy relevant to dental medicine. Module 11: Head and Neck Anatomy. Using didactic lectures and dissection laboratory activity, this module covers gross anatomy and function of the head and neck fascia, musculoskeletal, nervous and organ systems. Three-dimensional relationships among anatomical structures are reinforced by in-depth dissections of the head and neck. Emphasis is placed on application of that knowledge to clinical problems.

IBSS 1507 Respiratory and Urogenital Systems for Dental Students
IBSS 1507 spans two interdisciplinary modules that study the respiratory system and urogenital systems. Module 12: Respiratory System. The disciplines of gross anatomy, histology, biochemistry, physiology, microbiology and pathology cover the structure and function of the respiratory system. Topics include the gross anatomy, histology and biochemistry of the respiratory system, pulmonary mechanics, gas exchange, and control of ventilation, as well as infections and diseases of the respiratory system. Module 13: Urogenital System. The disciplines of gross anatomy, histology, physiology, microbiology and pathology cover the structure and function of the urinary system. Topics include the gross anatomy and histology of the reproductive and urinary systems, renal and acid base physiology, sexually transmitted disease and common pathologies of the urinary system.

IBSS 1504 Neural and Musculoskeletal Systems for Dental Students
IBSS 1504 contains two interdisciplinary modules that cover the structure, function, and relevant pathology of the peripheral nervous system and the musculoskeletal system. Module 8: Nervous System. The disciplines of embryology, gross anatomy, histology, physiology, and pathology cover the basic structure and function of the nervous system with an emphasis on the peripheral nervous system. Topics include the embryological development, histology and structure of the nervous system, physiology of nerve and neuromuscular transmission and peripheral neuromuscular disease. Module 9: Musculoskeletal System. The disciplines of histology, gross anatomy, physiology, biochemistry, and pathology cover the basic principles of musculoskeletal structure and function. Topics include histology of muscle and bone, gross anatomy of the upper extremity, physiology of skeletal muscle, and muscle metabolism. In addition, non-neoplastic bone diseases and diseases of muscle and joints are presented. In addition, there are three 1.5 hour gross anatomy laboratory sessions focused on the upper extremity.

IBSS 1505 Cardiovascular System for Dental Students
IBSS 1505 presents an interdisciplinary approach to the cardiovascular system. Module 10: Cardiovascular System. The disciplines of histology, gross anatomy, physiology, microbiology and pathology cover the basic structure and function of the cardiovascular system. Topics include gross anatomy and histology of the cardiovascular system, cardiac function, systemic and microcirculatory hemodynamics, control of blood pressure, infective endocarditis and cardiac disease.

IBSS 1508 Clinical Neuroscience for Dental Students
IBSS 1608 presents an interdisciplinary approach to clinical neuroscience with an emphasis on cranial nerve distribution and function. Module 14: Clinical Neuroscience. The disciplines of anatomy, physiology, microbiology and pathology cover the gross anatomy and function of the central nervous system (CNS). Topics include central neuroanatomy with emphasis on cranial nerve distribution and function, somatosensory function, special senses, CNS infectious disease, the motor system, higher cortical function and relevant CNS pathology. Clinical case studies are incorporated into the module to provide practice in applying basic science knowledge in clinical problem-solving scenarios.

IBSS 1609 Endocrine and Reproductive Systems for Dental Students
IBSS 1609 spans two interdisciplinary modules that provide a basic overview of the endocrine system, human reproduction, somatic growth and aging. Module 15: Endocrine Systems. The disciplines of gross anatomy, histology, physiology, microbiology, and pathology cover the basic structure and
PHAR 1640 Pharmacology for Dental Students

The various classes of drugs will be considered on the basis of both therapeutic use and organ systems. Drug classes most relevant to general dental practice, such as analgesics, drugs that affect the autonomic nervous system, sedatives, anxiolytics and muscle relaxants, local and general anesthetics, and antimicrobial therapy are considered in detail. Students will receive basic instruction on additional drug classes used in the treatment of allergies and asthma, osteoporosis, and cardiovascular, metabolic, gastrointestinal, psychiatric and immune system disorders. In addition, there is coverage of related topics such as general principles of drug action, pharmacokinetics, toxicology, and drugs of abuse. This course begins in the 5th week of the Fall Quarter DMD-2 (20 hours) and continues for an additional 30 hours in the Winter Quarter DMD-2. This course is taught during the Fall and Winter quarters with a single grade given at the completion of the course.

5 credits

Dental Sciences

Integrated Oral Health Science Sequence

The Integrated Oral Health Science Sequence (OHSS) is an interdisciplinary curriculum integrated across the biomedical, behavioral, and clinical sciences. This interdisciplinary sequence of courses spans the entire four years of the program. Didactic lectures covering the basic concepts are supplemented with active learning exercises in a small-group environment. Simulation laboratory procedures are introduced in a case contextualized manner; clinical scenarios are discussed and controversial topics are critically analyzed; and evidence-based discussions and practice is taught.

DENT 1510 Oral Facial Complex in Health

This course concentrates on the anatomy structure and function of the healthy oro-facial complex. The foundational knowledge of dental sciences is introduced including dental anatomy and morphology, dental terminology, dental health risk factors for prevalent dental diseases, and disease prevention. Students begin psychomotor skill development combined with the principles of ergonomic practice and infection control. Ethics, professionalism, and behavioral aspects of patient care are introduced in case-based scenarios, small-group discussions, and with standardized patient interactions.

8 credits

Prerequisites: DENT 1510 Oral Facial Complex in Health

DENT 1520 Risk Assessment, Diagnosis, and Preventive Care of Oral Diseases

This course will continue the development of foundational knowledge with an emphasis on the assessment of the patient using various techniques required for patient assessment, diagnosis, and the determinants for early intervention. The development of psychomotor skills and ergonomic practice continues relative to cariology, periodontal disease management, and operative dentistry.

9.5 credits

DENT 1530 Treatment Planning and Initial Therapeutic Interventions

This interdisciplinary course concentrates on operative dentistry with regard to occlusal and proximal direct restorations in the anterior and posterior in both permanent and primary dentition, pulpal response to restorative procedures, and periodontal disease. The course will continue with the principles of occlusion and introduce factors
contributing to malocclusion. There will be emphasis on how these areas relate to each other, and students will be introduced to the rationale and process for patient centered comprehensive treatment planning.

8 credits
Prerequisites: DENT 1520 Risk Assessment, Diagnosis, and Preventive Care of Oral Diseases

DENT 1610 Management of Complex Oral Conditions
This multidisciplinary course will introduce endodontic therapy and indirect restorations for the child and adult patient. The assessment, diagnoses, and treatment planning aspects of this care will be delivered in the context of patient care situations located in the electronic patient record. Critical analysis of findings and decision making will be a mainstay of the course, predicated and leading into simulated patient care. The learner will be trained in the evaluation of patients for oral pathology and provided opportunities to practice her/his developing diagnostic skills. Additionally, assessment of the oro-facial growth and development of the child patient will be incorporated as well as variations in treatment considerations for the elderly patient.

8.2 credits
Prerequisites: DENT 1530 Treatment Planning and Initial Therapeutic Interventions

DENT 1620 Diagnosis and Rehabilitative Dentistry
This course concentrates on the restoration of oral facial function resulting from advanced disease. During oral pathology and rehabilitative dentistry fixed and removable prosthodontics and the associated periodontal concerns will be covered as well as related ethical concerns, practice management, and occupational hazards. Oral pathology will be addressed at a level that prepares the student to manage infection, cysts, tumors, fibro-osseous lesions and traumatic injury. This course is taught during the Fall and Winter quarters with a single grade given at the completion of the course.

11 credits
Prerequisites: DENT 1610 Management of Complex Oral Conditions

DENT 1625 Dental Pharmacotherapeutics
Dental Pharmacotherapeutics is taken concurrently with Pharmacology for Dental Students (PHAR 1640) in the Fall and Winter Quarters of DMD-2. The primary goal of this course is to discuss the most current clinical application of therapeutic agents commonly used in general dentistry, such as analgesics, antibiotics, sedatives and anxiolytics, local and general anesthetics and vasoconstrictor agents, in preparation for entry into clinic training in Spring Quarter of DMD-2. Additional topics for discussion to be determined by the course director may include the pharmacotherapy of smoking cessation, alternative medicine products, and emerging trends in drug therapy. Clinical problem solving and management is emphasized, with reference to issues associated with the pediatric and geriatric populations, pregnancy and breastfeeding, poly-pharmacy and drug-drug interactions. The basics of prescription writing and prescribing regulations relevant to dentistry are covered. This course is taught during the Fall and Winter quarters with a single grade given at the completion of the course.

1.5 credits
Prerequisites: DENT 1620 Diagnosis and Rehabilitative Dentistry

DENT 1630 Comprehensive Oral Healthcare
This course concentrates on the restoration of the patient’s oral facial function in cases of advanced disease. During Comprehensive Oral Healthcare, fixed and removable prosthodontics and the associated periodontal concerns are continued from the previous term. Fixed partial dentures are emphasized as well as related ethical concerns, practice management, and communications. The indications and options for pain and anxiety control are addressed, as is hard/soft tissue trauma, urgent care, medical emergencies, TMD, and oral surgery. Topics in oral pathology continue from the previous quarter.

11 credits
Prerequisites: DENT 1620 Diagnosis and Rehabilitative Dentistry

DENT 1650 Oral Health Sciences 2.4
This course will begin with an orientation to the clinical facilities, including the policies and procedures, the dental unit, the electronic dental record, sterilization and distribution, radiological equipment and other components and equipment of the patient care facility. The course will progress through clinical activities that will assist the Student Dentist in transitioning from a simulated patient care environment to working with a patient in a clinical setting. The Student Dentist will begin to develop skills to provide comprehensive oral healthcare to patients. A portion of this course will concentrate on geriatric patients and special needs individuals with physical, psychological, and medical concerns. There will be a focus on dental care and the unique needs, both behavioral and clinical, which arise when working with aged and confined individuals. Student Dentists will develop the knowledge and skills needed to render comprehensive oral healthcare to the geriatric and special needs populations. They will also gain an understanding of the complexities of aging, learn about adaptive devices, and study the role of dentistry in comprehensive patient care while learning to manage patients with medical, physiological, and physical disabilities. Student Dentists will be provided greater detail on indications and options for pain and anxiety control, hard/soft tissue trauma, urgent care, medical emergencies, TMD, and oral surgery.
Within this course is also an oral health seminar, Ground Rounds, in which the Student Dentist will participate in
cases that may include treatment planning, evidence-based dentistry, critical thinking, and other topics of interest as defined by the current patient population and the Clinical Care Coordinators.

17.8 credits
Prerequisites: DENT 1630 Comprehensive Oral Healthcare

DENT 1700 Patient Assessment and Diagnosis of Head and Neck Disorders
This course is co-taught by faculty of the College of Dental Medicine and the Chicago College of Osteopathic Medicine and will provide a systematic process for students to learn the evaluation, diagnosis, and management of diseases, disorders, and conditions of the head and neck.
2 credits
Prerequisites: DENT 1650: Oral Health Sciences 2.4

DENT 1710, 1730, 1750, 1770 Oral Health Sciences 3.1A, 3.2A, 3.3A, 3.4A
Student Dentists will experience clinical treatment of patients in four consecutive quarters. Student Dentists will have patient care experiences with all age groups from children to geriatrics and with patients of varying treatment difficulty under the supervision of the clinical faculty. Student Dentist will provide comprehensive clinical care (restorative dentistry, endodontics, and periodontics) to patients within comprehensive care group practices. Student Dentists will rotate through clinical experiences in oral radiology, oral medicine, oral surgery, screening and diagnosis, urgent care and pediatric dentistry/orthodontics.
Each course 13.5 credits
Prerequisites: Prerequisite for DENT 1710 is DENT 1650 Oral Health Sciences 2.4; prerequisite for DENT 1730, 1750, and 1770 is the preceding dental course in the series

DENT 1711, 1731, 1751, 1771 Oral Health Sciences 3.1B, 3.2B, 3.3B, 3.4B
Student Dentists will also participate in didactic coursework, small group learning experiences and Case presentations. This coursework will provide a review for National Boards Dental Examinations Part II and for Regional Dental Testing Examination. In Urgent and Surgical Care sessions, students will continue to learn more advanced local anesthesia procedures, and will be introduced to mild and moderate sedation modalities and the associated risk management strategies. Issues related to hard and soft tissue trauma, management of medical emergencies, TMD and oral surgeries will also be addressed.
Each course 3 credits
Prerequisites: Prerequisite for DENT 1711 is DENT 1650 Oral Health Sciences 2.4; prerequisite for DENT 1731, 1751, and 1771 is the preceding dental course in the series

DENT 1777 Comprehensive Clinical Course
Comprehensive Clinical Course will run through all four quarters of the DMD year three curriculum. There will be a series of formative and summative professional competencies addressed and assessed in this course.
0-8 credits

DENT 1810, 1830, 1850, 1870 Oral Health Sciences 4.1A, 4.2A, 4.3A, 4.4A
Student Dentists will experience clinical treatment of patients in four consecutive quarters. Student Dentists will have patient care experiences with all age groups from children to geriatrics and with patients of varying treatment difficulty under the supervision of the clinical faculty. Student Dentist will provide clinical care (advanced restorative dentistry, advanced endodontics, and advanced periodontics) to patients within comprehensive care group practices.
Each course 12.5 credits
Prerequisites: Prerequisite for DENT 1810 is DENT 1770 Oral Health Sciences 3.4A; prerequisite for DENT 1830, 1850, and 1870 is the preceding dental course in the series

DENT 1811, 1831, 1851, 1871 Oral Health Sciences 4.1B, 4.2B, 4.3B, 4.4B
Student Dentists will also rotate through clinical experiences in screening and diagnosis, urgent care and pediatric dentistry/orthodontics. Within each course will be coursework designed to prepare Student Dentists for the practice of dentistry in a private practice setting. The coursework will first concentrate on developing leadership, management, and business skills necessary to operate a successful practice. It will also prepare Student Dentists for their first job in dentistry, their role as an associate and then their purchase of a dental practice.
Each course 3 credits
Prerequisites: Prerequisite for DENT 1811 is DENT 1771 Oral Health Sciences 3.4B; prerequisite for DENT 1831, 1851, and 1871 is the preceding dental course in the series

DENT 1888 Comprehensive Clinical Course
Comprehensive Clinical Course will run through all four quarters of the DMD year four curriculum. There will be a series of clinical competencies addressed and assessed in this course.
0-8 credits

DENT 1890 Community Oral Health
Student Dentists will accumulate a broad experience of most age groups and with patients of different treatment difficulty under the supervision of the clinical faculty in rotations through extramural treatment experiences as part of the final four quarters of clinical experience. Most of these experiences will be in community health centers and clinics that focus on underserved populations. Student Dentists will register for
ELECTIVES

**DENT 1501 Dental Research**
Students may participate in this research elective throughout the four-year DMD program. Students must engage in research an average of one half-day per week for three consecutive quarters. Release time will be made available for students who enroll in this elective.
6 credits

**DENT 1899 Externship**
Students that wish to participate in an externship offered at various dental specialty and other training programs may register for this course with the approval of the Dean or designate.
0.1-0.2 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 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 Review and Progression**
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.

**Student Academic Progress Committees, Preclinical and Clinical**
Student Academic Progress Committees, Preclinical and Clinical, will meet as needed to review academic and professional progress of dental students. Students with one or more academic failure(s) are required to meet with the 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 e-mail and/or telephone. Students may be invited to the meeting to provide a statement; they may be asked to teleconference into the meeting by telephone or through e-mail; or they may communicate their statement by writing to the committee. The committee will consider course failure(s) (F) and withdrawal failure(s) (W/F) in recommending action regarding student academic progress in the curriculum. Decisions of the committees are forwarded to the Dean and e-mailed or mailed to the students. The right of appeal exists and is described elsewhere in this catalog.
Appeals must be filed with the Dean within three working days following official notification of the committee decision.

Students who have successfully completed their dental education program and paid all tuition and fees will be recommended to the Faculty Senate for graduation.

**Academic Warning and Probation**

**Academic Warning**
An academic warning is a formal notification of substandard academic performance in a quarter, and it serves as a caution to students that continued performance at this level may result in their placement on academic probation. To return to good academic standing, students must correct deficiencies and incur no further failures. Academic Warnings, Leaves of Absence and Dismissals may be issued by the Student Academic Progress Committee, Preclinical or Clinical upon the review of students who have failed one course (grade of less than C) in a quarter or upon the unsuccessful completion of a probationary period. When students are placed on Academic Warning, it is noted in their academic record. Subsequently, when students return to good academic standing, this is also noted in their academic record. Academic Warnings are not noted on transcripts. Students on Academic Warning are ineligible for leadership positions, elective courses and research activity.

**Academic Probation**
Academic Probation represents a notice that continued inadequate academic performance might result in Dismissal.
If students on academic probation successfully complete their probationary period, their academic status reverts to Academic Warning. To return to good academic standing, students must correct deficiencies and incur no further failures. When students are placed on academic probation, it is noted in their academic records. Subsequently, when students return to good academic standing, this is also noted in their academic records. Academic probation is not noted on transcripts. Students on academic probation are ineligible for leadership positions, elective courses and research activity.
Student Academic Progress Committee Guidelines

The following table is a summary of potential academic situations and provides guidance to the Student Academic Progress Committees for recommended action:

<table>
<thead>
<tr>
<th>DMD-Courses</th>
<th>Possible Action</th>
<th>Academic Status</th>
<th>Retake Courses</th>
<th>Action Following Retake</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Passed</td>
<td>Promote</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One (1) Failure* - DENT Courses</td>
<td>Academic LOA</td>
<td>Probation</td>
<td>Next Academic Year</td>
<td>Fail-Dismissal Pass-Promote</td>
</tr>
<tr>
<td>One (1) Failure* - Non DENT Courses</td>
<td>Retake Course</td>
<td>Probation</td>
<td>Interquarter Break or Next Academic Year</td>
<td>Fail-Dismissal Pass-Promote</td>
</tr>
<tr>
<td>Two (2) Failures* - Non DENT Courses (same academic year)</td>
<td>Academic LOA or Dismissal</td>
<td>Probation Dismissed</td>
<td>Next Academic Year Not Applicable</td>
<td>Fail one or both courses-Dismissal Pass both courses- Promote</td>
</tr>
<tr>
<td>Two (2) Failures* - Non DENT Courses (over more than one academic year)</td>
<td>Retake Course or Academic LOA or Dismissal</td>
<td>Probation Dismissed</td>
<td>Interquarter Break or Next Academic Year Not Applicable</td>
<td>Fail one or both courses-Dismissal Pass both courses- Promote Not Applicable</td>
</tr>
<tr>
<td>Three (3) Failures*</td>
<td>Dismissal</td>
<td>Dismissed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Failure(s): A failure for a course remains on the student transcript as an F regardless of the outcome of subsequent course retakes.

Course repeat schedule is at the discretion of the Student Academic Progress Committee.

Withdrawal/Failing (W/F) may be considered as a course failure by the Student Academic Progress Committee.

Advanced Standing

All requests for advanced standing by admitted, transfer, or enrolled students are processed on a course-by-course basis by the Office of the Dean. Courses must be at the graduate level to be considered for advanced standing. Students should submit a letter to the Office of the Dean listing the course(s) under consideration. Students must provide an official course description, transcript, and syllabus for each course previously taken. It is expected that a minimum grade equal to a B would have been achieved in the petitioned class. The decision to grant or deny advanced standing will be made by the department in consultation with the CDMI Dean’s Office.

Appeal Process

Following notification of a decision of the Student Academic Progress Committee (Preclinical or Clinical), a student may appeal the decision to the Dean of the CDMI in writing within three (3) working days from the decision. The Dean’s decision is final. 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.

Attendance Policy

Midwestern University College of Dental Medicine-Illinois encourages students to attend all lectures and requires attendance for all laboratory activities and clinical assignments.

Course Prerequisites

Prerequisites for courses may be established by the course director who 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 approval by the Associate Dean for Academic Affairs or designate, or the Dean.
Course Retake
The grade for a failed 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.

Note: Students will be assessed tuition and related fees for any additional years.

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 transcripts, but it is kept in student disciplinary files. Disciplinary probation information may be shared with clinical sites that are affiliated with Midwestern University's educational programs.

Dismissal
Matriculation and participation in dental school is a privilege, not a right. Therefore, students can be dismissed for the following reasons:

1. Failure to achieve minimum academic standards
2. Failure to exhibit the personal qualifications and ethical standards necessary to the practice of dentistry
3. Violation of Midwestern University College of Dental Medicine-Illinois rules and regulations that are grounds 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. Upon matriculation all students will be assigned a faculty member advisor through the Office of the Associate Dean for Academic Affairs or designate.

Failure Policy for First- and Second-Year Students
The faculty provides didactic programs and measures student performance in subject areas deemed necessary for dental practitioners. Students who do not demonstrate sufficient academic progress assume the obligation and responsibility to make up academic failures. First-year students must successfully pass all failed courses before they can be promoted to the second year. Likewise, third-year students can only begin clinical rotations and be promoted to the third year if they pass all requirements of the preclinical curriculum.

Grade Point Average
The grade point average (GPA) 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 it does not include any grades or credits for courses audited or accepted for transfer, or courses with a grade of withdrawal (W), withdrawal failing (W/F), 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent (%)</th>
<th>Quality Points (per credit)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93–100</td>
<td>4.00</td>
<td>—</td>
</tr>
<tr>
<td>A–</td>
<td>90–92</td>
<td>3.67</td>
<td>—</td>
</tr>
<tr>
<td>B+</td>
<td>87–89</td>
<td>3.33</td>
<td>—</td>
</tr>
<tr>
<td>B</td>
<td>83–86</td>
<td>3.00</td>
<td>—</td>
</tr>
<tr>
<td>B–</td>
<td>80–82</td>
<td>2.67</td>
<td>—</td>
</tr>
<tr>
<td>C+</td>
<td>77–79</td>
<td>2.33</td>
<td>—</td>
</tr>
<tr>
<td>C</td>
<td>70–76</td>
<td>2.00</td>
<td>—</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 70</td>
<td>0.00</td>
<td>For professional programs</td>
</tr>
<tr>
<td>I</td>
<td>—</td>
<td>0.00</td>
<td>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 reexamination. It is the responsibility of the student to request an extension from the course instructor. By assigning an &quot;I&quot; 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. To resolve an incomplete grade, an instructor must fill out and submit a Change of Grade form to the Registrar. All incomplete grades must be resolved within 10 working days starting from the first Monday following the end of the quarter unless there is written authorization by the Dean to extend the deadline. If an incomplete grade remains beyond the 10 days, it may be converted to a grade of “F,” which signifies failure of the course.</td>
</tr>
<tr>
<td>IP</td>
<td>—</td>
<td>0.00</td>
<td>An In Progress (IP) grade may be assigned by a course director when a student qualifies for reexamination. It is the responsibility of the student to request an extension from the course instructor. By assigning an &quot;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 &quot;IP” in progress is used when extenuating circumstances make it necessary to extend the grade completion period past 10 days (e.g., illness, family death). The completion period should not exceed one quarter with notification to the Registrar.</td>
</tr>
<tr>
<td>P</td>
<td>—</td>
<td>0.00</td>
<td>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.</td>
</tr>
<tr>
<td>W</td>
<td>—</td>
<td>0.00</td>
<td>Withdrawal/Passing. is given if the grade achieved up to the time of withdrawal is &gt;70% or C. Withdrawal/Passing is not counted in the GPA calculation, and is not counted in credit hour accrual for graduation.</td>
</tr>
<tr>
<td>W/F</td>
<td>—</td>
<td>0.00</td>
<td>Withdrawal/Failing is given after 50% of a course is completed 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. &quot;W/F” may be considered as a failure by a Student Academic Progress Committee 1 or 2. Students are not allowed to withdraw from a course after the end of the eighth week of class.</td>
</tr>
<tr>
<td>AU</td>
<td>—</td>
<td>0.00</td>
<td>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.</td>
</tr>
<tr>
<td>AP</td>
<td>—</td>
<td>0.00</td>
<td>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.</td>
</tr>
</tbody>
</table>

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.

National Boards Policy
All students are required to pass the NBDE Part I examination before the first day of the fall quarter of DMD-3. If students encounter a catastrophic event that prevents them from taking the examination during that timeframe, the Dean may allow them to enter DMD-3 and take the examination at a later date (mutually agreed upon by the student and Dean).

Students who fail the NBDE Part I on their first attempt will be allowed to continue as registered students as noted below. Students:

• Must meet with the Dean of Basic Sciences, the Dean of Students, the Dean, MWU CDMI or designate, and selected Course Directors, to develop an individualized course of study focused toward retaking and passing the NBDE Part I. This will include recommendations to the student to uncover potential test-taking challenges and develop a structured study schedule.

Students who fail the NBDE Part I on their second attempt will be allowed to continue as registered students as noted below. Students:

• Must meet with the Dean of Basic Sciences, the Dean of Students, the Dean, MWU CDMI or designate, and selected Course Directors, to discuss a strategy for retaking and passing the NBDE Part I.
• Must retake the examination at a date approved by the Dean or Designate upon recommendation of the above individuals.
• May be required to take an Independent Study elective or leave of absence in order to prepare for the retake of NBDE Part I at the date specified by the Dean. Tuition, related expenses, and arrangements are the responsibility of students.
• Are required to sit for the NBDE Part I (third attempt) and if successful, are then eligible to continue in DMD-3.

Students who fail to pass NBDE Part I for the third time need to wait one full year prior to retaking the examination per National Board rules, and will be placed on Academic Leave Absence and will be required to appear before the Student Academic Progress Committee, Preclinical. The committee may recommend a further remediation plan or recommend dismissal for failure to meet the academic requirements of MWU CDMI. These students will be charged tuition on a prorated basis for additional months of education. Passing any portion of a licensing examination is not a substitute for passing a Midwestern University course. Students must pass NBDE Part I in order to begin the DMD-4 year.

Retake Course Grade
The grade for a failed course repeated at an outside institution, or at Midwestern University and passed is recorded as a grade of “C”.

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 degree program. These standards apply to all students applying for or currently receiving financial assistance. The policy and procedure for assessing financial aid status is noted in the Student Financial Services section of this catalog.

FACULTY
Ellen Andrews, Ph.D.
Loyola University Chicago
Assistant Professor, Department of Anatomy

Marsha A. Babka, D.D.S.
University of Illinois College of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

James K. Bahcall, D.M.D., M.S.
Tufts University
School of Dental Medicine
Associate Professor, College of Dental Medicine-Illinois

Bryan C. Bjork, Ph.D.
University of Iowa
Assistant Professor, Department of Biochemistry

Andrew T. Bronny, D.D.S.
Loyola University Chicago
School of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

John R. Burdick, Ph.D.
Iowa State University
Dean of Basic Sciences and Professor, Department of Microbiology and Immunology

Nalini Chandar, Ph.D.
University of Madras, India
Professor, Department of Biochemistry

Kelli J. Christensen, D.D.S.
University of Illinois College of Dentistry
Assistant Professor, College of Dental Medicine-Illinois
Mae Ciancio, Ph.D.
Loyola University
Stritch School of Medicine
Assistant Professor, Department of Physiology

Gary L. Drahos, D.D.S., M.J., B.S., RPh
University of Illinois
College of Dentistry
Associate Professor, College of Dental Medicine-Illinois

Joshua R. Edwards, Ph.D.
Michigan State University
Assistant Professor, Department of Pharmacology

Mary Egan-Kramer, B.S.N, D.D.S.
University of Illinois
College of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

Michael J. Fay, Ph.D.
University of Mississippi
School of Pharmacy
Program Director, Biomedical Sciences and Professor, Department of Pharmacology

Michele Fornaro, Ph.D.
University of Turin, Italy
Assistant Professor, Department of Anatomy

Arthur Freeman, Ed.D., Sc.D.
Columbia University
Program Director and Professor, Department of Behavioral Medicine

Jay R. Geaman, D.D.S.
Georgetown University
School of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

Victor R. Gonzalez, D.D.S., M.S.
University of San Carlos de Guatemala
Assistant Professor, College of Dental Medicine-Illinois

Joanna Goral, Ph.D.
Loyola University
Associate Professor, Department of Anatomy

David J. Green, Ph.D.
George Washington University
Assistant Professor, Department of Anatomy

Jacalyn M. Green, Ph.D.
University of Michigan
Associate Professor, Department of Biochemistry

Kyle K. Henderson, Ph.D.
Kansas University Medical Center
Assistant Professor, Department of Physiology

Thomas C. Hudson, D.D.S.
University of Illinois
College of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

Sandra E. Inouye, Ph.D.
Northwestern University
Professor, Department of Anatomy

Yosif M. Jabir, D.D.S.
Creighton University
Group Practice Coordinator and Assistant Professor, College of Dental Medicine-Illinois

Bruno C. Jham, D.D.S., M.S., Ph.D.
University of Maryland, Baltimore
School of Dentistry
Assistant Dean for Academic Affairs and Assistant Professor, College of Dental Medicine-Illinois

Robert B. John, D.D.S.
University of Illinois
College of Dentistry
Group Practice Coordinator and Assistant Professor, College of Dental Medicine-Illinois

Kenneth J. Kadziela, D.D.S., M.S.
Loyola University Chicago
School of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

Preetha P. Kanjirath, B.D.S., M.D.S., M.S.
Mangalore University, India
Assistant Dean, Preclinical Program Director and Associate Professor, College of Dental Medicine-Illinois

Angelina S. Kula, D.D.S.
Loyola University Chicago
School of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

Sophie La Salle, Ph.D.
McGill University, Canada
Assistant Professor, Department of Biochemistry

Margaret H. Lechner, R.N., M.S.
University of St. Francis
Assistant Professor, Department of Family Medicine

Kathy J. LePard, Ph.D.
Ohio State University
Professor, Department of Physiology

James C. Lin, D.M.D.
Southern Illinois University
School of Dental Medicine
Assistant Professor, College of Dental Medicine-Illinois
Sean M. Lynch, Ph.D.  
University of Ulster, Northern Ireland  
Professor, Department of Biochemistry

M.A.J. Lex MacNeil, D.D.S.  
Dalhousie University, Canada  
Faculty of Dentistry  
Dean and Professor, College of Dental Medicine-Illinois

National University of Mexico  
Associate Professor, College of Dental Medicine-Illinois

Reji T. Mathew, B.D.S., M.D.S.  
University of Connecticut  
School of Dental Medicine  
Assistant Professor, College of Dental Medicine-Illinois

Alejandro M. Mayer, Ph.D.  
University of Buenos Aires  
Professor, Department of Pharmacology

Paul F. McCulloch, Ph.D.  
University of Saskatchewan  
Professor, Department of Physiology

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

Ashlesh Murthy, M.B.B.S., Ph.D.  
University of Texas at San Antonio  
Associate Professor, Department of Pathology

George K. Niiro, Ph.D.  
Loyola University  
Chair and Associate Professor, Department of Anatomy

Lillian Obucina, D.D.S., J.D.  
Northwestern University  
Assistant Professor, College of Dental Medicine-Illinois

Kathleen P. O’Hagan, Ph.D.  
Rutgers University  
Chair and Professor, Department of Physiology

Dennis J. Paulson, Ph.D.  
Texas Tech University School of Medicine  
Professor, Department of Physiology  
Vice President and Chief Academic Officer for Medical and Dental Education

Stephen Palatinus, D.D.S.  
University of Illinois  
College of Dentistry  
Assistant Professor, College of Dental Medicine-Illinois

Charles W. Patterson, D.D.S., M.S., M.B.A.  
University of Michigan  
School of Dentistry  
Assistant Professor, College of Dental Medicine-Illinois

Frank U. Perry, D.D.S., M.Ed.  
Saint Louis University Dental School  
Assistant Professor, College of Dental Medicine-Illinois

Jacob D. Peuler, Ph.D.  
Pennsylvania State University  
Professor, Department of Pharmacology

Balbina J. Plotkin, Ph.D.  
University of Tennessee  
Professor, Department of Microbiology and Immunology

Maura Porta, Ph.D.  
Loyola University  
Assistant Professor, Department of Physiology

Frank J. Prerost, Ph.D.  
DePaul University  
Professor, Department of Family Medicine

Walter C. Prozialeck, Ph.D.  
Thomas Jefferson University  
Chair and Professor, Department of Pharmacology

Kyle H. Ramsey, Ph.D.  
University of Arkansas for Medical Sciences  
Associate Dean, Basic Sciences and Professor, Department of Microbiology and Immunology

Fred D. Romano, Ph.D.  
Loyola University Chicago  
Dean, College of Health Sciences-Downers Grove and  
Professor, Department of Physiology

Joyce Savage, D.O., M.S.  
Kansas City University of Medicine and Biosciences  
Instructor, Department of Microbiology and Immunology

Ira M. Sigar, Ph.D.  
Illinois Institute of Technology  
Assistant Professor, Department of Microbiology and Immunology

Michelle Singleton, Ph.D.  
Washington University  
Professor, Department of Anatomy

Jacquelyn M. Smith, Ph.D.  
University of Michigan  
Dean, College of Health Sciences-Glendale and Professor,  
Department of Physiology
Michelle Swanson-Mungerson, Ph.D.
Loyola University
Stritch School of Medicine
Associate Professor, Department of Microbiology and Immunology

Vaibhav Tiwari, Ph.D.
Banaras Hindu University, India
Assistant Professor, Department of Microbiology and Immunology

Joseph A. Toljanic, D.D.S.
Loyola University Chicago
School of Dentistry
Associate Professor, College of Dental Medicine-Illinois

Kevin E. Van Kanegan, D.D.S.
University of Illinois
College of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

Lon J. Van Winkle, Ph.D.
Wayne State University School of Medicine
Chair and Professor, Department of Biochemistry

Susan M. Viselli, Ph.D.
Pennsylvania State University
Professor, Department of Biochemistry

Michael V. Volin, Ph.D.
The University of Chicago
Chair and Associate Professor, Department of Microbiology and Immunology

Darryn R. Weinstein, D.D.S., M.B.A., M.P.H.
University of Iowa
College of Dentistry
Assistant Dean for Clinical Education and Associate Professor, College of Dental Medicine-Illinois

Larry N. Williams, D.D.S.
University of Tennessee
College of Dentistry
Assistant Professor, College of Dental Medicine-Illinois

James M. Woods, Ph.D.
Loyola University Chicago
Associate Professor, Department of Microbiology and Immunology