The Rosalind Franklin University of Medicine and Science (RFU) Academic Catalog for the 2022 - 2023 academic year is an informational document to help guide students through academic processes, procedures and coursework. This document is not a contract; faculty listings and courses are subject to change.

The catalog is a planning tool for RFU students and is divided into the following sections:

**The University**

The University section provides an overview of RFU and lists university-wide policies and procedures that apply to RFU students.

**Academic Programs**

The Academic Programs sections list graduate and professional degree and certificate programs, and information that pertains to students of each college and school within the university.

**Course Descriptions**

The Course Descriptions section is an index of the courses offered at RFU. The course descriptions are arranged alphabetically by course prefix. Each course description includes a course prefix, course number, course title, quarter hours, and course content.

**Clinical Affiliations**

The Clinical Affiliations section lists the healthcare organizations that RFU partners with to provide students hands-on experience during the pursuit of their degrees.

Please note that while this catalog includes a complete list of course offerings at RFU, not all courses are offered every academic year. Please consult with an academic advisor for the courses offered in your program course plan.

2022-2023 Academic Catalog

Published by:
Office of the Registrar
Rosalind Franklin University of Medicine and Science
3333 Green Bay Road
North Chicago, IL 60064-3095
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The University

Notice
Rosalind Franklin University of Medicine and Science reserves the right to change, at any time and without notice, the requirements, regulations, course and program offerings, fees, charges and other matters addressed in this catalog. RFU reserves the right to modify or terminate programs described herein. However, modification of program requirements will not adversely affect those students already enrolled in a program, nor will termination of a program affect anything other than the closure of future admission to that program.

Non-Discrimination/Equal Opportunity Statement
Rosalind Franklin University of Medicine and Science (hereinafter “university”) does not discriminate (or tolerate those who do) on any unlawful basis (such as race, skin color, national origin, sex, including sexual orientation and gender identity, disability, age, religion, genetic information, military status or family status) in its education programs or activities, including admission, financial aid, student activities and events and other terms, conditions or privileges of enrollment.

The Full Equal Opportunity Policy (Non-Discrimination Policy) can be found in the Student Handbook.

Further information regarding matters contained in this policy may be obtained from:

Eric G. Williams, Ph.D.
Vice President for Diversity, Equity and Inclusion
3333 Green Bay Road
North Chicago, IL 60064

Title IX Policy Statement
Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 et seq. notes: No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance. This policy is primarily designed and intended to comply with the requirements of Title IX yet also comply with other applicable federal and Illinois laws that prohibit discrimination based on sex, including Title VII of the Civil Rights Act of 1964, 110 ILCS 155, and 775 ILCS 5/5A. Acts amounting to discrimination based on sex are sometimes termed “sexual misconduct or sexual violence.”

This policy applies to all of the educational programs and activities that the University offers. This policy therefore applies to all university faculty, staff, and students, and the behavior addressed in this policy includes that which might be exhibited by other parties. Should the
University become aware that any contractor, vendor, partner or other affiliate engages in behavior that is prohibited by this policy, it will take appropriate action.

Amnesty Statement: The University provides immunity to any student who reports, in good faith, an alleged violation of this policy to the Title IX Coordinator or through any other established reporting mechanism of the University for reports of discrimination based on sex, so that the reporting student will not receive a disciplinary sanction by the University for a student conduct violation, such as underage drinking or possession or use of a controlled substance, that is revealed in the course of such a report, unless the University determines that the violation was egregious, including without limitation an action that places the health or safety of any other person at risk.

Non-Discrimination Statement: The University does not engage in or tolerate discrimination on the basis of sex (which includes sexual harassment and sexual violence) in its educational or employment programs and activities, including admission, and such behavior is prohibited. Such behaviors are forms of unlawful sex discrimination under Title IX and other federal and state laws. Through a thorough and impartial investigation, the University is committed to responding to any instance of such discrimination by taking prompt and effective steps to end the discrimination and address its effects.

Pregnancy/Parenting Statement: The University prohibits discrimination against students, faculty and staff based on pregnancy, false pregnancy, termination of pregnancy, childbirth, or recovery from any of these conditions.

Retaliation Statement: The University prohibits retaliation against any individual who, in good faith, reports or discloses an alleged violation of this policy, files a complaint, or otherwise participates in the complaint resolution procedure. Any person, who is found to have retaliated in violation of this policy, will be subject to sanctions up to and including termination of employment or dismissal from the education program, as applicable.

The institutional official responsible for coordinating and overseeing university efforts to comply with the requirements of Title IX and this policy is called the Title IX Coordinator. This policy serves as the primary governing document for the Title IX Coordinator regarding investigations of sex discrimination involving employees and students. Questions or concerns regarding Title IX, this policy, or other aspects of the University's commitment to sex non-discrimination may be directed to the Title IX Coordinator:

Allena Barbato, JD
Director of Title IX Compliance and Equity Officer
847-578-7314
TitleIX.Coordinator@rosalindfranklin.edu
**Accommodations and Student Disability**

Rosalind Franklin University of Medicine and Science supports students who may qualify for reasonable accommodations under the Americans with Disabilities Act (ADA). Each college/school has developed a set of behavioral (technical) standards that are required of all graduates.

Disability discrimination includes when the university or other entity covered by the Americans with Disabilities Act, as amended, or the Rehabilitation Act, as amended, treats a qualified individual with a disability who is a student or applicant unfavorably because they have a disability. Disability discrimination also occurs when the university treats an applicant or student less favorably because they have a history of a disability (such as cancer that is controlled or in remission) or because they are believed to have a physical or mental impairment that is not transitory (lasting or expected to last 6 months or less) and minor (even if they do not have such an impairment). The university provides reasonable accommodation to a student or applicant with a disability. Please see the Accommodations and Student Disability Procedures in the Student Handbook for more information.

Students encountering difficulties in the process of managing accommodation with in the academic department should seek further advocacy from the ADA Coordinator. Continued follow-up of arrangements for accommodations will be monitored by the ADA Coordinator as needed. The university contact person is:

**ADA Coordinator**
Rosalind Franklin University of Medicine and Science
3333 Green Bay Road
North Chicago, IL 60064

**Student Complaint Process**

Rosalind Franklin University of Medicine and Science places value on the right of every student to submit a complaint or concern regarding their academic experience.

Complainants have the following rights:

- A complaint will be treated with appropriate confidentiality and in a timely manner.
- A complainant has the right to withdraw the complaint in writing at any point in the process.
- A complainant may file a written complaint without fear of retaliation. If the complaint is filed without basis or with the intent to harm a member of the RFU community, disciplinary action may be taken.
- The procedure will be applied consistently to students across colleges/units, including online-learning students.

Depending upon the nature of the complaint, the student should follow the appropriate procedures outlined below.
Academic Complaints

A student who wishes to make a complaint that is specific to a course should direct their concern to the course instructor or course director.

- If the matter is still not resolved to the satisfaction of the student, they are encouraged to make an appointment with the department chair to discuss the matter further.
- A student who wishes to make a formal appeal of any decision arising from an action at the division/program level should follow the procedures in the college/school’s academic catalog.

Academic Integrity Concerns

A student who wishes to submit a complaint regarding an alleged violation of academic integrity by a fellow student should report the issue to the Associate Vice President for Student Affairs via the Incident Report Form.

Equal Opportunity Complaints

A student who wishes to file a complaint regarding equal opportunity or non-discrimination is encouraged to reference the Equal Opportunity Policy and follow the procedures for reporting, by contacting the Division of Student Success and Wellness at 847-578-3205 or in person in the Health Sciences Building, Room L.675, to ensure proper action is taken. As an alternative, reports may be made to the Office of Compliance directly or through EthicsPoint, a NAVEX Global company (which allows anonymity), either via its toll-free number 800-254-0460 or its URL http://rosalindfranklin.ethicspoint.com.

Sex Discrimination and Title IX Complaints

The university does not engage in or tolerate discrimination on the basis of sex (which includes sexual harassment and sexual violence) in its education programs and activities, and the university is committed to respond to any instance of such sex discrimination by taking prompt and effective steps to end the discrimination and address its effects. Students are encouraged to reference the full Title IX and Sex Discrimination Policy and report concerns promptly to our Title IX Coordinator, Allena Barbato, JD, Director of Title IX Compliance and Equity Officer.

Learner or Campus Environment Complaints

Any member of the RFU community who wishes to submit a complaint regarding the learner or campus environment including, but not limited to, university-wide services, student programs, counseling and psychological services, student health, educational technology, wellness center, enrollment management, library services or student accounting, is to be directed to the Division of Student Student Success and Wellness. Under the authority of the Vice President for Student Success and Wellness, the staff of the division will assist students in appropriate management of the complaint depending on the nature of the concern.
Concern that Due Process Was Not Followed

The decision of the college dean or Vice President for Student Success and Wellness is considered a final decision; however, if the student believes that due process was not followed, they have the option of submitting a written appeal to the provost. In the written appeal, the student must identify how due process was not followed. The complainant must provide the college or university with a copy of the written appeal to the provost. The provost’s findings will be communicated in writing to the student and college or university representative.

Potential Criminal Activity

In the case of potential criminal activity violations, the student may immediately contact Campus Safety. Campus Safety will take appropriate immediate action to ensure the safety of all students and will file appropriate incident reports to other areas of the university as deemed necessary.

Non-University Options for Dispute and/or Complaint Resolution Complaints

If a student has exhausted all possible attempts with the institution and thinks the institution was unable to satisfactorily resolve the complaint, the student may contact the Illinois Board of Higher Education (IBHE) and file a complaint at http://complaints.ibhe.org.

If a student wishes to file a complaint about the institution having a substantive problem in its ability to meet the Criteria for Accreditation by the Higher Learning Commission (HLC), the regional accrediting body for RFU, the student can file a complaint with the HLC. The student can go to the HLC’s webpage https://www.hlcommission.org/Student-Resources/complaints.html to see the type of complaints that the commission will review and the process involved for filing an appropriate complaint.

Student Treatment

The university will not tolerate student mistreatment. A primary goal of RFU is the education of students who will meet the healthcare needs of society in a caring, competent and professional manner. A profession based on the ideals of service to others should be sensitive to the humanity of its practitioners, especially during training. Insensitivity during training runs counter to the fundamental tenets of health care and impairs the ability of many students to maintain their idealism, caring and compassion past training into their careers. This affects the quality of patient care as well as collegial relationships.

Examples of mistreatment include sexual harassment; discrimination or harassment based on race, religion, ethnicity, gender, sexual orientation, physical disability or age; humiliation; psychological or physical punishment; and the use of grading and other forms of assessment in a punitive manner. The occurrence, either intentional or unintentional, of such incidents results in a disruption of integrity, trust and the spirit of learning.

Students who experience “mistreatment” should report the specific incident(s) to the offender’s supervisor and to the dean or associate dean of their school or the Vice President for Student
Success and Wellness. All incidents will be handled in an equitable manner with the guarantee of each student’s rights with appropriate protection for both the complainant and accused.

Appropriate counseling can be arranged by contacting the Student Counseling Service at 847-578-8723.

**Statement of Policy on Professionalism and Ethics**

All students at RFU are expected to exhibit professional, responsible and ethical behavior. Students should display this behavior as students in the university, as healthcare providers in the clinical setting and as researchers in the laboratory or clinic. All students should, therefore, possess the highest degree of personal integrity and be able to reason about ethical issues in their professional life. Students are expected to treat patients and research subjects with respect, compassion and sincerity, irrespective of race, color, creed, ethnic origin, religion, disability, gender, sexual orientation, or socioeconomic class, and to maintain strict confidentiality.

Students are expected to be honest and trustworthy, to respect the property of others and to follow the code of professional ethics appropriate to their discipline. Any departures from these standards may result in disciplinary action. See the Student Conduct Policy in the Student Handbook for details.
## 2022-2023 Academic Calendar

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Degree and Certificate Programs

Doctoral Degrees

Chicago Medical School

Doctor of Medicine (MD)

College of Health Professions

Doctor of Nursing Practice (DNP) in Nurse Anesthesia
Doctor of Philosophy (PhD) in Interprofessional Healthcare Studies
Doctor of Philosophy (PhD) in Psychology
Doctor of Physical Therapy (DPT)
Doctor of Science (DSc) in Interprofessional Healthcare Studies

College of Nursing

Doctor of Nursing Practice (DNP): Psychiatric Medical Health Nurse Practitioner

College of Pharmacy

Doctor of Pharmacy (PharmD)

Dr. William M. Scholl College of Podiatric Medicine

Doctor of Podiatric Medicine (DPM)

School of Graduate and Postdoctoral Studies

Doctor of Philosophy (PhD) in Biochemistry and Molecular Biology
Doctor of Philosophy (PhD) in Cell Biology and Anatomy
Doctor of Philosophy (PhD) in Cellular and Molecular Pharmacology
Doctor of Philosophy (PhD) in Microbiology and Immunology
Doctor of Philosophy (PhD) in Neuroscience
Doctor of Philosophy (PhD) in Physiology and Biophysics

Combined Degree Programs

MD/PhD, DPM/PhD and PharmD/PhD in:
Biochemistry and Molecular Biology
Cell Biology and Anatomy
Cellular and Molecular Pharmacology
Microbiology and Immunology
Neuroscience
Physiology and Biophysics
Master of Science Degrees (MS)

College of Health Professions

Master of Science (MS) in Biomedical Sciences
Master of Science (MS) in Clinical and Lifestyle Nutrition
Master of Science (MS) in Health Administration
Master of Science (MS) in Health Professions Education
Master of Science (MS) in Lifestyle Medicine
Master of Science (MS) in Nutrition Education
Master of Science (MS) in Pathologists’ Assistant
Master of Science (MS) in Physician Assistant Practice
Master of Science (MS) in Population Health
Master of Science (MS) in Psychology: Clinical Counseling
Master of Science (MS) in Psychology: Clinical Psychology

School of Graduate and Postdoctoral Studies

Master of Science (MS) in Biochemistry and Molecular Biology
Master of Science (MS) in Cell Biology and Anatomy
Master of Science (MS) in Cellular and Molecular Pharmacology
Master of Science (MS) in Microbiology and Immunology
Master of Science (MS) in Neuroscience
Master of Science (MS) in Physiology and Biophysics

Bachelor of Science Degree (BS)

Dr. William M. Scholl College of Podiatric Medicine

Bachelor of Science (BS) in Biological Sciences

Post-Baccalaureate Certificates

College of Health Professions

Certificate in Health Administration
Certificate in Health Professions Education
Certificate in Lifestyle Medicine
Certificate in Nutrition for Healthcare Professionals
Certificate in Population Health Analytics
Certificate in Population Health Strategies
Welcome

As president and CEO of Rosalind Franklin University of Medicine and Science, it is my pleasure to share our 2022-2023 Academic Catalog and extend a warm welcome as you prepare to lead the future of health care and biomedical science.

RFU is rooted in the belief that health and scientific professions should be open to people of diverse backgrounds who are dedicated to the health and well-being of the populations in their care. We are committed to the interprofessional education of future clinicians and scientists – lifelong learners who are adaptable, resilient and committed to a model of practice and leadership based in shared responsibility and respect. We’re committed to you, to your academic success, and to your personal and professional growth and development.

During your time at RFU, you will forge strong bonds with students across disciplines and in research labs, and through participation in our more than 70 student-led organizations whose members work to improve wellness through community and professional engagement. You will enjoy supportive relationships with faculty advisors, deans and mentors. You will deepen understanding through early clinical exposures that include rotations with clinical partners, and through experiential learning aboard our Community Care Connection mobile health coach and our Interprofessional Community Clinic for the uninsured.

Throughout our history, our nationally recognized faculty, scientists and administrators have prioritized academic achievement and helped lead the transformation of our university through the development of new and better ways of teaching and learning, innovations in curriculum, and investments in student health and wellness. As members of the RFU community and future members of our 20,000-strong alumni network, you too will help advance our mission, embody our values and, most importantly, improve the health and well-being of the communities you serve.

Thank you for choosing RFU,

Wendy Rheault, PT, PhD, FASAHP, FNAP, DipACLM
President and CEO
President and Leadership

Wendy Rheault, PT, PhD, FASAHP, FNAP, DipACLM
President and CEO

James Carlson, PhD, PA-C, CHSE
Vice President for Interprofessional Education and Simulation

Moreen Carvan, EdD
Vice President for Academic and Faculty Affairs

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Executive Vice President for Finance and Administration

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Interim Dean, College of Pharmacy

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General Counsel

Ronald Kaplan, PhD
Executive Vice President for Research

Patrick Knott, PhD, PA-C
Interim Dean, College of Health Professions

Sandra Larson, PhD, CRNA, APN, FNAP
Dean, College of Nursing, Vice President of Partnerships

Nancy L. Parsley, DPM, MHPE
Provost

Chad B. Ruback, MSED, MBA
Vice President for Institutional Advancement

Eric Williams, PhD
Vice President for Diversity, Equity and Inclusion
Stephanie Wu, DPM, MS, FACFAS  
Dean, Dr. William M. Scholl College of Podiatric Medicine

**Faculty Directory**
Our most current Faculty Directory of full-time and core faculty can be found at this URL:  
https://www.rosalindfranklin.edu/academics/faculty/

**Mission and Vision**

**Mission:** To serve humanity through the interprofessional education of health and biomedical professionals, and the discovery of knowledge dedicated to improving wellness.

**Vision:** To be the premier interprofessional health sciences university.

**History**

Founded in 1912 in Chicago as a medical school determined to diversify the profession by rejecting the ethnic and racial quotas of the day, Rosalind Franklin University of Medicine and Science (RFU) is rooted in a proud history of inclusion.

Also founded in Chicago in 1912, Scholl College, which shared our founding principle of non-discrimination, joined RFU in 2001. From their earliest days, both institutions admitted working men and women from diverse backgrounds. In 1939, when war was declared in Europe, we welcomed refugee physicians and scientists.

Our Chicago Medical School (CMS) was the only privately funded, independent medical school in the nation to earn accreditation under stringent guidelines put in place after the 1910 publication of the landmark Flexner Report - aimed at improving the quality of medical services throughout the United States.

More than 50 years ago we envisioned the development of a university of health sciences where future health professionals from varied disciplines would train together and learn to work in teams. In 1967, we became one of the first such universities in the country.

Beginning in 1973, the university launched a campus transition from the city of Chicago to north suburban North Chicago. This move culminated in 1980 with the construction of the Basic Sciences Building and was aided by the university's enduring clinical affiliation with the neighboring Veterans Administration hospital, now the Captain James A. Lovell Federal Health Care Center.

Today, RFU’s defining focus on interprofessional, team-based education unites students in more than 30 graduate programs through Chicago Medical School, the College of Health Professions, the College of Nursing, the College of Pharmacy, the School of Graduate and Postdoctoral Studies and the Dr. William M. Scholl College of Podiatric Medicine.

In 2004, Rosalind Franklin University became the first medical institution in the nation to recognize a female scientist through an honorary namesake and took as its motto “Life in
“Discovery.” That year, we instituted a pioneering model of interprofessional education, clinical care and collaborative practice and celebrated the founding of our nationally recognized Center for Lower Extremity and Ambulatory Research at Scholl College. A decade of strategic growth followed, with a doubling of RFU’s enrollment and the addition of clinical programs including physical therapy, physician assistant studies and nurse anesthesia.

In our efforts to continue to enhance the diversity of our IP teams, in 2013 we dedicated the DeWitt C. Baldwin Institute for Interprofessional Education, a hub of learning, practice and research in support of our vision for team-based, patient-centered health care.

Our most recent campus expansion, the Innovation and Research Park, opened in early 2020. Also in 2020, the university began celebrating the centennial of the birth of its namesake, Rosalind Franklin, PhD, who confronted gender discrimination while making crucial contributions to the discovery of the structure of DNA, viruses and carbons. The Fall quarter of 2022 will see the opening of our College of Nursing – the first of its kind in Lake County, Illinois – which will enhance RFU’s focus on interprofessional education and advance the cause of health equity.

**Location**

Rosalind Franklin University of Medicine and Science is located at

3333 Green Bay Road  
North Chicago, IL 60064  
United States of America

Visitor parking is available in the South Parking Lot.

**Directions**

From O’Hare Airport/Chicago: Take Tri-State Tollway (294) North toward Milwaukee. Go east on Rt. 137 (Buckley Road) to Rt. 131 (Green Bay Road). Turn right (south) on Green Bay Road. RFU is on the left.

From Midway Airport/Chicago: Take Interstate I-55 North to I-90 West. Exit onto Interstate I-94 West to Tri-State Tollway (294) North toward Milwaukee. Exit off on Rt. 137 (Buckley Road) heading east to Rt. 131 (Green Bay Road). Turn right (south) on Green Bay Road. RFU is on the left.

From Mitchell Airport/Milwaukee: Take Interstate I-94 East toward Chicago/Indiana. Exit off on Rt. 137 (Buckley Road) and head left onto Buckley Road Turn right (south) on Green Bay Road. RFU is on the left-only about ¼ mile from the 137/131 intersection.

From Chicago Edens Expressway: Take 94 North to exit Rt. 137 (Buckley Road). Turn east on Rt. 137 to Rt. 131 (Green Bay Road). Turn right (south) on Green Bay Road. RFU is on the left.)
Accreditation

State Authorization and Regional Accreditation
Rosalind Franklin University of Medicine and Science receives its degree-granting authority from the Illinois Board of Higher Education and is accredited by the Higher Learning Commission.

Illinois Board of Higher Education
1 North Old State Capitol Plaza, Suite 333
Springfield, IL 62701-1377
217-782-2551
www.ibhe.org

Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604
800-621-7440
www.hlcommission.org

The Illinois Board of Higher Education (IBHE) online complaint system is accessible through the agency’s website at http://complaints.ibhe.org. Please visit the university Accreditation webpage to find additional accreditation information by clicking on the Higher Learning Commission Mark of Affiliation (icon).

Program Accreditations

Allopathic Medicine (MD)–Chicago Medical School
Accredited by the Liaison Committee on Medical Education (LCME)

The U.S. Department of Education recognizes the LCME for accreditation of programs of medical education leading to the MD degree in the United States and Canada. Accreditation is a process of quality assurance in post-secondary education that determines whether an institution or program meets established standards for function, structure and performance. The accreditation process fosters institutional and program improvement. It is a prerequisite for eligibility of graduates to obtain medical licensure in most states and for students to sit for U.S. Medical Licensure Examinations (USMLE) and to obtain federal student loans. Graduates from institutions whose programs are accredited by the LCME have unrestricted eligibility to enter graduate medical education programs accredited by the Accreditation Council on Graduate Medical Education (ACGME).

Clinical Psychology (PhD)–College of Health Professions
Accredited by the American Psychological Association

Office of Program Consultation and Accreditation
American Psychological Association
750 1st Street, NE
Washington, DC 20002
202-336-5979
Nurse Anesthesia (DNP)—College of Health Professions
Accredited by the Council on Accreditation (COA) of Nurse Anesthesia Educational Programs
Council on Accreditation of Nurse Anesthesia Educational Programs
222 South Prospect Avenue
Park Ridge, IL 60068-4001
847-655-1160

Pathologists’ Assistant (MS)—College of Health Professions
Accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
Pathologists’ Assistant Program Accreditation
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
5600 N. River Road, Suite 720
Rosemont, IL 60018
773-714-8880

Pharmacy (PharmD)—College of Pharmacy
Accredited by the Accreditation Council for Pharmacy Education (ACPE)
Council for Pharmacy Education
190 South LaSalle Street, Suite 2850
Chicago, IL 60603-3499
312-664-3575
www.acpe-accredit.org

Physical Therapy (DPT)—College of Health Professions
Accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE)
Commission on Accreditation in Physical Therapy Education (CAPTE)
3030 Potomac Avenue, Suite 100
Alexandria, VA 22305-3085
800-999-2782
accreditation@apta.org
www.capteonline.org

Physician Assistant Practice (MS)—College of Health Professions
Accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)
The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Continued status to the Physician Assistant program sponsored by Rosalind Franklin University of Medicine and Science. Continued is a status that remains in effect until the program closes or withdraws from the accreditation process, or until accreditation is withdrawn for failure to comply with the ARC-PA Standards.

The Physician Assistant program’s accreditation history can be viewed on the ARC-PA website at http://www.arc-pa.org/accreditation-history-rosalind-franklin-university-of-medicine/

**Podiatric Medicine (DPM)–Dr. William M. Scholl College of Podiatric Medicine**

Accredited by the Council on Podiatric Medical Education

Council on Podiatric Medical Education
9312 Old Georgetown Road
Bethesda, MD 20814
301-571-9200

Accreditation is an indication of public approbation, attesting to the quality of the podiatric medical education program and the continued commitment of the institution to support the educational program. The council is recognized as the professional institutional accrediting agency for podiatric medical education by the U.S. Department of Education and by the Council for Higher Education Accreditation.

**Student Handbook**

The University Academic Catalog focuses on academic programs offered and the various policies and procedures related to academic progress at RFU. Students should refer to the Student Handbook for information about the following:

- Accommodations and Student Disability
- Alcohol and/or Drug Use
- Campus Safety
- Communication Methods
- Emergency Text Messaging System
- Holiday Policy
- Identification Card and Copy Card Policies
- Information Technology Services: Principles and Policies
Classification of Students

**Regular Students:** This category includes all full-time, half-time, and less-than-half-time students who have met the full admission requirements and are matriculating for a degree or certificate.

**Conditional Students:** Conditional status is a probationary status for degree students who are allowed to matriculate despite not having met all of the regular admissions requirements, such as those whose regular applicant file shows specified course or academic deficiencies or insufficiencies. A program can nevertheless recommend that a student be admitted as a conditional student, and will specify the conditions, and the terms and timeline of their fulfillment, to the student.

Students can be admitted on a conditional status for no more than two quarters, but programs may specify shorter time limits. If the conditions are not met within the time limit, the registrar’s office and the responsible person (Program Director or Dean) in the program will be notified, and the student will be restricted from further registration and progression, which will trigger all the effects of the Continuous Enrollment policy for such situations, including the possibility of dismissal.

**Non-Degree Students:** Non-degree status is designated for two types of students who hold a bachelor’s degree:
- **General Non-Degree Student**
  - Students who are a college student or college graduate interested in taking graduate courses for credit that will transfer back to another institution.
  - Students who want to take courses for personal interest without any intent of completing a degree program.
  - Students who are a professional seeking courses for professional development.
• Student-at-Large Non-Degree Student
  o Students who are a college graduate interested in taking courses for credit (i.e., for graduate school preparation, or fulfilling prerequisites, etc) with the intent of completing a degree at RFU.

**Full-time/Half-Time/Less-Than-Half-Time:** A student’s enrollment status at the university is quantified by the number of credits they are registered for during a term. For the purposes of federal reporting, enrolled students are certified during each quarter of study as enrolled full-time, half-time, or less-than-half-time. Certification of full-time, half-time, or less-than-half-time status impacts loan deferment, medical insurance, etc, and is based on the number of registered credits in a term; this includes all credit-bearing courses offered through all delivery methods in a given quarter, but courses taken as “audit” are excluded:

• Full-Time Enrollment:
  o For Doctoral professional practice programs, all enrolled students in classes each quarter, regardless of registered credit amount
  o For Doctoral research programs, all enrolled students in classes each quarter, regardless of registered credit amount
  o For Masters degree, certificate, and non-degree programs, any student who is enrolled in 9 or more total registered credits each quarter

• Half-Time Enrollment:
  o For Masters degree, certificate, and non-degree programs, students who are enrolled in 4.50-8.99 total registered credits each quarter

• Less-Than-Half-Time Enrollment:
  o For Masters degree, certificate, and non-degree programs, students who are enrolled in 4.49 or less total registered credits each quarter
  o Students who are enrolled in at-large coursework not reflected as program specific enrollment

For students concurrent and active in more than one program during a given quarter, if at least one of the programs is a Doctoral program, their university enrollment status is considered full-time regardless of total registered credit amount. Otherwise, if they are concurrent and active in multiple Masters and/or non-degree programs during a given quarter, their university enrollment status is determined by the sum of all credits they are registered for in all of their programs.

**Admission**

Program admission committees adhere to ethical and fair practices in the selection process. RFU admissions committees practice holistic review of their applicants to ensure the enrollment of a talented and diverse class who are academically prepared and whose experiences demonstrate alignment with the mission of the university.

Degree-seeking status options and admission procedures may differ by academic program. Prospective students should consult the appropriate section(s) of this catalog for the specific program admission requirements.
General Admission Policies

Conflicts of Interest in the Admissions Process
RFU ensures an admissions process that takes into account academic and programmatic considerations when admitting and recruiting students. To that end, any admissions committee member is prohibited from participation in the discussion, review, interview or voting on any candidate with whom the member or guest of any admissions committee has a conflicting relationship. In addition, the selection of applicants shall not be influenced by political or financial favors.

Right to Rescind Admissions
RFU reserves the right to rescind any offer of admission based on the discovery of information such as, but not limited to, discrepancies between unofficial and official transcript(s), institutional actions cited, results of background check, incomplete prerequisite coursework, or any other requirement defined by the academic program.

Degree Admissions
Degree-seeking admissions are classified as either regular or conditional status. Students whose records satisfy the general requirements for admission and have been approved by the admissions committee for their program of interest are admitted as “Regular or Full” admissions status. Students who do not meet the program requirements may be awarded “Conditional or Provisional” admission or recommended for a “Denial” of admission.

Full Status
The following RFU minimum requirements apply to all graduate programs and will be verified by the Office of Admissions and Enrollment.

- **Transcripts:** Required from all institutions attended with proof of prerequisite coursework fulfilled. Final official transcripts fulfilling requirements are required to enroll at the university. Prerequisite coursework must be completed prior to enrollment. Final official transcripts with degree conferred where applicable need to be submitted no later than the end of the first month of initial enrollment or future registration beyond the first quarter will not be permitted.

- **Test Requirements:** Typically, the programs at RFU require a graduate examination such as the PCAT, MCAT or GRE of each applicant. Please consult the program section of the catalog to determine the appropriate examination required for admission.

- **Evidence of English Language Proficiency:** Applicants who come from a country or political entity (e.g., Quebec) where English is not the official language must show and submit adequate proficiency in English to do graduate work, as evidenced by a Test of English as a Foreign Language (TOEFL) exam. This requirement applies to, but is not limited to, applicants from the following countries: Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People’s Republic of China, Taiwan,
Japan, Korea, Southeast Asia and most European countries. The test score cannot be more than two years old. (Institutional Code for TOEFL is 1117)

- **Letters of Recommendation**: May be required by the college/program.
- **Personal Statement**: May be required by the college/program.
- **Other Requirements**: Additional requirements of some colleges/programs include volunteer experience, healthcare experience, shadowing, research and leadership experience, resume, academic writing sample, interview, etc. In addition, recommendation for admission by the graduate program or college to which application is made and/or by the dean or dean’s appointee for the college may be required.

The above requirements are the minimum RFU requirements for admission as a degree student; however, most programs have additional requirements. Consult the appropriate section(s) of this catalog for the specific admissions requirements of each program.

**Application Procedures**

Applicants should apply through the online application forms which may be accessed for each program here: www.rosalindfranklin.edu/admission-aid/#apply. Applications and supporting credentials should be submitted as early as possible, but no later than the respective program’s published deadlines. For programs that participate in an early decision application process, deadlines may be earlier.

Programs stipulate the definition of a complete application within the regulations of their profession and best practices. Students should consult the college or program section of the catalog to determine additional requirements.

Applicants may apply to multiple degree programs but can only enroll in one program per admission cycle unless admitted into a dual degree program option.

**Domestic Applicants**

Domestic applicants are citizens or lawful permanent residents of the United States, individuals with DACA status, or granted Asylee, Refugee or Paroled in the Public Interest status by the government. (If you have submitted an application, but have not yet been approved for U.S. Permanent Residency, or other aforementioned status, please see the instructions for International applicants in the next section.)

Minimum required materials for admission:

- **Completed Admission Application**: Students must submit an application to the CAS or UniCAS system and supplemental application where applicable. It must be completely filled out and submitted electronically.
- **Non-Refundable Application and Supplemental Fee**: These fees are associated with the processing of the application and supplemental application where applicable.
• **Official Transcripts:** Transcripts of all college-level work must be submitted in sealed envelopes as issued by the school to the required Central Application System (CAS) or UniCAS unless specified.

• **Unofficial Transcripts:** RFU will accept unofficial credentials uploaded to the online application systems for some programs. However, most programs require official transcripts. The online application for each program indicates which is acceptable. Additional official credentials may be required if the conferred degree is not reflected on the transcripts submitted or in-progress prerequisite courses are not reflected on the transcript submitted.

• **Letters of Recommendation:** Applicants can request online letters of recommendation through the online application system. Paper copies of recommendation letters are not accepted by the Office of Admissions and Enrollment. Please refer to program-specific requirements for details related to letters of recommendation.

• **Evidence of English Language Proficiency:** Applicants who come from a country or political entity (e.g., Quebec) where English is not the official language must show and submit adequate proficiency in English to do graduate work, as evidenced by a Test of English as a Foreign Language (TOEFL) exam. This requirement applies to, but is not limited to, applicants from Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People’s Republic of China, Taiwan, Japan, Korea, Southeast Asia and most European countries. The test score cannot be more than two years old. (Institutional Code for TOEFL is 1117)

• **Test Scores:** Must be sent directly from the testing service to the CAS or UniCAS system. Applicants are generally required to submit a standardized test applicable to the program of interest that could include MCAT, GRE, PCAT, etc. Please refer to program-specific requirements for details related to preferred test requirements.

### International Applicants

Rosalind Franklin University of Medicine and Science is authorized under federal law to enroll non-immigrant International students. Information about appropriate certification of International students is available from the Division of Diversity, Equity and Inclusion.

International applicants are citizens or permanent residents of a country to which they intend to return other than the United States. International applicants may be in the United States on an educational, worker or visitor visa which allows study in the United States, or be residing in their home country. International applicants who are requesting F-1 or J-1 visa eligibility documents are also required to provide evidence of financial support.

Applicants who have filed an application for U.S. Permanent Residency, but have not yet been granted approval, are considered International applicants.

Minimum required materials for admission:
• **Completed Admission Application**: Students must submit an application to the CAS or UniCAS system and supplemental application where applicable. It must be completely filled out and submitted electronically.

• **Non-Refundable Application and Supplemental Fee**: These fees are associated with the processing of the application and supplemental application where applicable.

• **Official Transcripts, Mark Sheets and Diplomas**: Transcripts of all college-level work must be submitted in sealed envelopes as issued by the school to the required Central Application System (CAS) or UniCAS unless specified. In general, International applicants are required to submit official copies of all academic records. Records must be in the original language and accompanied by English language translations. Specially prepared English versions are not acceptable in lieu of the records in the original language. If your degree is from an international school, submit official course-by-course evaluation from an accredited evaluation agency such as ece.org or wes.org.

• **Unofficial Transcripts**: RFU will accept unofficial credentials uploaded to the online application system for some programs. However, most programs require official transcripts. The online application for each program indicates which is acceptable. Additional official credentials may be required if the conferred degree is not reflected on the transcripts submitted or in-progress prerequisite courses are not reflected on the transcript submitted.

• **Letters of Recommendation**: Applicants can request online letters of recommendation through the online application system. Paper copies of recommendation letters are not accepted by the Office of Admissions and Enrollment. Please refer to program-specific requirements for details related to letters of recommendation.

• **Evidence of English Language Proficiency**: Applicants who come from a country or political entity (e.g., Quebec) where English is not the official language must show and submit adequate proficiency in English to do graduate work, as evidenced by a Test of English as a Foreign Language (TOEFL) exam. This requirement applies to, but is not limited to, applicants from countries that include: Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People’s Republic of China, Taiwan, Japan, Korea, Southeast Asia and most European countries. The test score cannot be more than two years old. (Institutional Code for TOEFL is 1117)

• **Test Scores**: Must be sent directly from the testing service to the CAS or UniCAS system. Applicants are generally required to submit a standardized test applicable to the program of interest that could include MCAT, GRE, PCAT etc. Please refer to program specific requirements for details related to preferred test requirements.

• **Declaration and Certification of Finances Form**: Is required upon admission. Federal regulations limit the types of financial assistance available to international students. International students should be prepared to finance either privately or through a sponsor the full cost of their RFU education. The International Student Certificate of Finances illustrates and documents that sufficient financial support is available to meet the projected total cost of attending RFU. The International Student Certificate is a component of the RFU international student form which must be submitted once the student has confirmed their seat in a particular program.
Post-Secondary Credentials

Applicants who have completed studies outside the United States must present all post-secondary school credentials. Such credentials must include a record of all studies completed to date, grades or examination results received (including failing as well as passing grades), maximum and minimum grades obtainable, rank in class, degrees, diplomas and certificates earned, and length of the school year. Documents must be authentic, and those not written in English must be accompanied by certified English translations. Copies are acceptable when certified as authentic by the issuing institution. Official documents should be sent by the issuing institution directly to the respective centralized application system associated with the RFU program. If an applicant’s degree is from an international school, submit official course-by-course evaluation from an accredited evaluation agency such as www.ece.org or www.wes.org.

Visa Certification

The International student form will contain the following:

- Application for the SEVIS Certificate of Eligibility (Form I-20)
- Declaration and Certificate of Finances (be careful to select the specific program)
- Transfer request form*
- RFU Health Insurance information

*Students already in the United States with valid F-1 status and plan to transfer will also need to complete a Transfer Request Form. To obtain the most comprehensive and up-to-date information regarding eligibility to transfer, please visit www.ice.gov/sevis/f1-transfers.

Financial Arrangements

In order to issue the Form I-20, evidence must be provided of appropriate funding to meet U.S. tuition and living expenses, specifically for the first year of study. The financial documents will need to include a copy of a bank statement issued within the last six months. Federal regulations limit the types of financial assistance available to international students. International students should be prepared to finance either privately or through a sponsor the full cost of their RFU education. The International Student Certificate of Finances illustrates and documents that sufficient financial support is available to meet the projected total cost of attending RFU. The International Student Certificate is a component of the RFU international student form which must be submitted once the student has confirmed their seat in a particular program.

Non-Degree Applicants

Minimum required materials for non-degree admission:

- Completed Application: Students must submit an electronic application to the RFU application system and it must be completely filled out.
- **Official Transcripts, Mark Sheets and Diplomas:** Official transcripts showing evidence of having earned a bachelor’s degree (or highest degree earned if applicable) from an accredited college or university.

- **Unofficial Transcripts:** RFU will accept unofficial credentials uploaded to the online application system for some programs. However, most programs require official transcripts. The online application for each program indicates which is acceptable. Additional official credentials may be required if the conferred degree is not reflected on the transcripts submitted or in-progress prerequisite courses are not reflected on the transcript submitted.

- **Personal Statement:** Students must submit a statement explaining reasons for seeking to take course(s) as a non-degree student.

- **Evidence of English Language Proficiency:** Applicants who come from a country or political entity (e.g., Quebec) where English is not the official language must show and submit adequate proficiency in English to do graduate work, as evidenced by a Test of English as a Foreign Language (TOEFL) exam. This requirement applies to, but is not limited to, applicants from the following countries: Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People’s Republic of China, Taiwan, Japan, Korea, Southeast Asia and most European countries. The test score cannot be more than two years old. (Institutional Code for TOEFL is 1117)

**Changing from Non-Degree to Degree**

Non-degree graduate students interested in changing to degree status must adhere to the requirements specified for domestic or international degree-seeking students for their desired program/college. All application credentials must be on file before the student will be considered for degree status. The appropriate online application and all required application materials, including official transcripts, must be submitted by the application deadline of the program/college to which the student is applying. Please see the admissions section for each program/college to determine the application procedures and deadlines to follow.

**Changing Academic Programs/Adding a Second Program**

Students interested in changing academic programs from one degree-seeking program to another should first consult with an academic advisor for the program they are seeking to enroll in. Students will need to apply to the desired program/college and submit all necessary application credentials in order to be considered. Students will have to submit all official transcripts (including those from RFU) by the deadline and adhere to all admissions requirements at the time of application.

**Combined Degree Enrollment**

Current RFU students can expand and enhance their skills as healthcare professionals with the addition of a specialization degree or certificate within our online curriculum. A student must seek approval from their current program prior to applying for enrollment in a combined program.
To apply, students must complete the following:

- **Combined Degree Application**: The application can be found on the RFU Admissions and Enrollment InSite page. This application and supporting documents must be received by the Office of Admissions and Enrollment by the published application deadline.
- **Personal Essay**: Attach a one-page essay stating your reasons for pursuit of this course of study; indicate how it will help you achieve future career plans and list educational goals you wish to achieve. Please note qualities you think will make you a successful candidate for an online program.
- **Dean’s Letter**: A letter of support must be submitted by the dean (or dean’s designee) of your current school/college for students in CMS, COP and SCPM, or your Department Chairperson for CHP, verifying your academic performance will not be jeopardized by concurrent enrollment.
- **Transcripts**: If applying to the Master of Science in Nutrition program, submit the official transcripts showing completed courses in human nutrition and lifecycle nutrition.

### Transfer Credit

Transfer credit is academic credit that is awarded to a student by another college or university and is accepted for application to the requirements of an undergraduate, graduate or professional degree at Rosalind Franklin University of Medicine and Science.

RFU students who have been admitted to specific degree programs and have earned credit at another college or university may petition to apply such credit toward a degree. Transfer of credit is not applicable to students enrolled in certificate programs. By definition, a petition to transfer credit is a request for an exception to the rule that all courses must be taken at RFU. Faculty within a program may make the decision as to whether transfer courses will be applied to a program plan and assume the responsibility to review transfer courses for verification of the core learning competencies, expectations and criteria for the requested transfer. Individual departments and programs may have limits on the use of transfer credits from other institutions. To be considered for transfer credit a student must be in good academic standing and:

- Demonstrate that the course meets and/or contains equivalent core learning competencies for the requested transfer, shown through a course syllabus and/or other official course material and an official transcript;
- Earned the credit at a college or university that is regionally accredited as recognized by the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA);
- Earned a grade of A or B. (RFU will accept a Pass grade if the course is graded only on a pass-fail basis.);
- Demonstrate how the course meets degree requirements at the college or university where the credit was earned.

Course credits must be transferred in total or not at all. The transferred credit appears on the RFU transcript and the associated grades will appear on the student record and is counted in the
cumulative number of credits earned. Transfer credit grades are not computed in the student’s RFU cumulative GPA. Credit from all semester-system schools will be transferred according to the standard ratio of 1.0 semester hour = 1.5 RFU quarter hour.

**Articulation and Pathway Agreements**
The academic programs of Rosalind Franklin University work with area colleges and universities to create articulation and pathway agreements to serve students who are interested in careers in the health professions that require completion of an accredited or board approved graduate degree program to practice in a particular field or specialty. Each Agreement provides details regarding the acceptance of transfer credit, advanced standing, course prerequisites, admission processes, and other related information. Through many of these formal agreements, students are able to complete relevant degrees in less time overall. For additional information about each articulation and pathway agreement, please contact the specific RFU academic program listed below.

**Allopathic Medicine (MD) – Chicago Medical School**
DePaul University
Lake Forest College
Cook County Health Oral and Maxillofacial Surgery Residency Program

**Biomedical Sciences (MS) – College of Health Professions**
Lake Forest College

**Clinical Counseling (MS) – College of Health Professions**
Lake Forest College

**Online Masters Programs (MS) – College of Health Professions**
Gulf Coast Dietetic Internship Program
New York Distance Dietetic Internship (NYDDI)
Nutrition Ink Dietetic Internship Program (NIDIP)
St. Cloud Hospital Dietetic Internship Program

**Pathologists’ Assistant (MS) – College of Health Professions**
DePaul University

**Pharmacy (PharmD) – College of Pharmacy**
College of Lake County
Carroll University
Carthage College
DePaul University
Lake Forest College
University of Wisconsin-Parkside

**Physical Therapy (DPT) – College of Health Professions**
DePaul University
Lake Forest College
Wisconsin Lutheran College

**Physician Assistant Practice (MS) – College of Health Professions**
DePaul University
Lake Forest College

**Podiatric Medicine (DPM) – Dr. William M. Scholl College of Podiatric Medicine**
Carroll University
Carthage College
DePaul University
Lake Forest College
Lewis University
North Central College
University of Wisconsin-Milwaukee
Wisconsin Lutheran College

*This listing is accurate upon the date of publication. New agreements may be formed throughout the course of an academic year.*

**Background Check**
The student background check process includes background checks on prospective students and those on existing students. Background checks are conducted on prospective students and the results of those background checks are used for educational purposes, primarily for making decisions regarding matriculation. Background checks are conducted on existing students enrolled in certain healthcare education programs and the results of those background checks are used for educational purposes, primarily to facilitate placement of students in educational experiences at clinical and other sites that have access criteria. The results of those background checks may contain information that is protected by law and is uniquely sensitive. This policy addresses the process in which student background checks are conducted and the results of those student background checks are used and maintained in an effort to promote compliance with the law and recognize the uniquely sensitive information that may be involved.
Results of Background Check:

Internal Use: University faculty and staff may, on a need to know basis only, use the results of background checks only for the following education purposes unless expressly approved by the Vice President for Student Success and Wellness:

- Making decisions regarding matriculation; and
- To facilitate placement of students in educational experiences at clinical and other sites that have access criteria.

Disclosure to Others: University faculty and staff shall not disclose the results of background checks to any person external to the university (unless expressly approved by the Vice President for Student Success and Wellness).

Safeguards to Protect: Background check results are considered confidential information and university faculty and staff shall utilize reasonable safeguards to protect the results of background checks from inappropriate use and disclosure.

Immunization

I. Immunization Requirements and Resources

- A. Introduction and Purpose: All students entering Rosalind Franklin University of Medicine and Science (RFUMS) are required to show proof of immunity through immunization records and (in the case of clinical programs), blood titers in order to ensure that the spread of communicable diseases is minimized. Each student must also complete a health history and physical form documenting their health status. These requirements comply with the State of Illinois College Immunization Code (77 ILL. ADM. CODE 694) as well as follow guidelines and recommendations from the Centers for Disease Control and Prevention and the Immunization Action Coalition.

- B. Procedures and Policies for All Programs: Each student must provide evidence that he/she has met the immunization requirements as outlined on the Pre-Matriculation Immunization Form. In accordance with the University requirements set forth by the Division of Student Success and Wellness, each student will create a personal profile through CastleBranch or MedProctor. The CastleBranch/MedProctor portal requires a student to select the program he/she is enrolled in; Clinical or Non-Clinical immunization requirements are assigned to a student’s CastleBranch/MedProctor account accordingly:
  - Clinical Programs: College of Health Professions (CHP), Chicago Medical School (CMS), College of Pharmacy (COP), College of Nursing (CON), and Scholl College of Podiatric Medicine (SCPM)
  - Non-Clinical Programs: Biomedical Sciences (BMS), Board Review, Pre-Matriculation Program (PMP), and School of Graduate and Postdoctoral Studies (SGPS)

  In addition to the immunization requirements, every student must complete a physical exam within one year prior to the start of classes. He/she must submit a
completed Health History and Physical Form signed by a healthcare provider and the student.

- All students, irrespective of the program they are enrolled in, can obtain the two required forms (Pre-Matriculation Immunization AND Health History and Physical) from their CastleBranch/MedProctor account. The forms are to be downloaded, completed, and re-uploaded to their CastleBranch/MedProctor profile. All documents must include the student’s first and last name.

- Students can obtain the required immunizations, antibody titers and physical exam through the Student Wellness Center or elsewhere. Orders for these immunizations and titers can be obtained from an appropriate licensed provider including providers at the Student Wellness Center. First-time appointments for immunizations and titers may require a 15-minute visit with a healthcare provider to establish a patient-provider relationship. If subsequent visits are required, it will be determined by the provider after the initial visit. It is the student's responsibility to bring paper copies of all immunization records, including any previous titer (blood test) lab reports, and the Student Health and Physical Form (if completed elsewhere) to the first appointment. If these documents are not supplied, the appointment will be re-scheduled.

- Students who request exemptions to this policy will be referred to the Division of Student Success and Wellness at RFUMS and must request their exemption for medical or religious reasons on the Immunization Exemption Form. Students are not considered compliant with immunization requirements with an exemption until they have received an approval/waiver letter and the letter is uploaded and accepted to their MedProctor/CastleBranch account. If an exemption is granted, it may limit exempted students’ ability to rotate at certain clinical sites which require the vaccine and do not allow for individual exemptions as necessary. Every effort will be made to place exempted students at sites that allow for exemptions but this placement is not guaranteed. This issue may affect exempted students’ ability to progress if sites that allow exemptions are not able to be identified.

- **C. Specific Procedures for Clinical Programs** (Applies only to students enrolled in CHP, CMS, COP, and SCPM): The student must upload to their CastleBranch/MedProctor personal profile all titer lab reports, including initial titer results that are negative, along with proof of immunizations where necessary. All documents must include first and last name.

  NOTE: The student must continue to upload documents for any subsequent requirements that appear in their CastleBranch/MedProctor personal profile.

  - 1. Proof of one Tdap vaccine in adolescence or adulthood is required. If the Tdap vaccine was more than 10 years ago, proof of a Td vaccine within the past 10 years is required.

  - 2. IgG antibody titer results must be submitted for measles (rubeola), mumps, rubella, varicella, and hepatitis B surface antibody [after completion of the 3-dose hepatitis B (HepB-alum) vaccine series or the 2-dose Heplisav-B (HepB-CpG)]
vaccine series]. These five antibody titers must show levels in the immune or positive range; a quantitative numerical result is required for the hepatitis B surface antibody.

3. If the titers for measles (rubeola), mumps, or rubella are negative or equivocal, then the prior MMR immunization history should be reviewed.

   a. A student with negative titers who has never received MMR vaccination should receive two MMR vaccinations four weeks apart with titers drawn not less than four weeks post the second vaccination. If the repeat titers are negative, the student should receive one more MMR vaccine with titers drawn not less than four post vaccination.

   b. A student with negative titers who has documentation of two prior MMR vaccines should receive one MMR booster vaccine with titers drawn not less than four weeks post vaccination.

   c. If the student has had three documented MMR vaccinations and the follow up titers are still negative, no further MMR vaccination is required. The student must contact a healthcare provider to obtain written documentation stating that they are a vaccine non-responder. This document must be uploaded to MedProctor. The student should be counseled by their healthcare provider regarding risks of exposure to measles (rubeola), mumps, or rubella. Precautions to prevent infection should be outlined by their healthcare provider.

4. If the titer for varicella is negative or equivocal, the prior varicella immunization history should be reviewed.

   a. If the student has no documentation of past varicella immunization, the student needs to complete a series of two varicella immunizations administered at least 28 days apart (even if the student has had chicken pox). A titer should be redrawn not less than four weeks post the second vaccination. If the titer is negative, the student should receive one more varicella vaccine with a titer redrawn not less than four weeks post vaccination.

   b. If the student has documentation of two prior varicella vaccines, the student should receive one varicella vaccine and the titer should be redrawn not less than four weeks post vaccination.

   c. If students have had three documented varicella vaccines and the follow up titer is still negative, no further varicella vaccination is required. The student must contact a healthcare provider to obtain written documentation stating that they are a vaccine non-responder. This document must be uploaded to MedProctor. The student should be counseled by their healthcare provider regarding risks of exposure to varicella. Precautions to prevent infection should be outlined by their healthcare provider.

5. If the student has never received either the 3-dose hepatitis B (Hep-B alum) vaccine series or the 2-dose Heplisav-B (HepB-CpG) vaccine series, one of the following vaccination schedules needs to be initiated:
a. 3-dose hepatitis B (HepB-alum) vaccine series schedule:
   - The second vaccination should be given one month after the first.
   - The third vaccination should be administered five months after the second.
   - A hepatitis B surface antibody titer is drawn one month after the third vaccination.

b. 2-dose Heplisav-B (HepB-CpG) vaccine series schedule:
   - The second vaccination should be given one month after the first.
   - A hepatitis B surface antibody quantitative titer is drawn one month after the second vaccination.

6. If the student has received a properly spaced series of hepatitis B vaccine but the hepatitis B surface antibody titer comes back negative or equivocal, the student should receive a single “booster” dose of hepatitis B vaccine.
   a. A repeat hepatitis B surface antibody quantitative titer is to be drawn not less than four weeks after the booster dose.
   b. If the repeat hepatitis B surface antibody titer is negative or equivocal after the booster dose, a second series of hepatitis B vaccine on the usual schedule should be completed and the titer tested again not less than four weeks after the final dose.
   c. If the test is still negative after a second vaccine series, the hepatitis B surface antigen and total hepatitis B core antibody should be tested.
   d. If the hepatitis B surface antigen or total hepatitis B core antibody is positive, the student needs further evaluation to determine their hepatitis B status. He/she must be seen by a primary care physician for follow-up.
   e. If the student’s hepatitis B surface antigen and total hepatitis B core antibody are negative, the student should be considered a vaccine non-responder and must obtain written documentation from their healthcare provider stating such. The document must be uploaded to MedProctor. The student should be counseled by their healthcare provider regarding risks of exposure to hepatitis B virus, precautions to prevent infection, and post-exposure hepatitis B immune globulin prophylaxis for known or likely exposure to blood that is positive for hepatitis B surface antigen.

7. Each student must undergo a 2-Step PPD [two tuberculosis (TB) skin tests administered 7-21 days apart] testing within six months prior to the start of classes, regardless of bacilli Calmette-Guerin (BCG) vaccination status. Alternatively, a QuantiFERON Gold tuberculosis (TB) blood test within six months prior to the start of classes is accepted.
   a. For students with a new or history of a positive tuberculosis (TB) test [PPD ≥10mm induration or an Interferon Gamma Release Assay (IGRA) blood test], a baseline chest x-ray is required within 12 months prior to the start of classes. The student must provide documentation of the positive PPD skin test (date administered, date read, and millimeters of induration).
or IGRA lab report, a copy of the chest x-ray report, and a completed annual TB Symptom Screening Questionnaire.

- b. Students with a new positive TB skin test (PPD) must be referred to a physician for follow-up.
- c. After the initial 2-Step PPD, students must maintain annual 1-Step PPD updates. Annual tuberculosis skin testing will be provided through the Health Clinics at no charge to the student once the entry PPDs have been completed. Alternatively, annual QuantiFERON Gold TB testing is accepted (this is not provided through the Health Clinics).
- d. A student with a known past positive TB test must complete an annual TB Symptom Screening Questionnaire. Any student who develops TB symptoms must follow up with a physician and have an updated chest x-ray.

8. Seasonal influenza vaccination is required annually, before October 1st, after matriculation.

9. COVID-19 vaccination is required of all students with one of the following:
   - Pfizer (two doses, 21 days apart; booster six months after initial doses)
   - Moderna (two doses, 28 days apart; booster six months after initial doses)
   - Johnson & Johnson (on dose; booster two months after initial doses)

D. Specific Procedures for Non-Clinical Programs (Applies only to students enrolled in BMS, Board Review, PMP, and SGPS): The student must upload their CastleBranch/MedProctor personal profile proof of immunizations. All documents must include first and last name.

NOTE: The student must continue to upload documents for any subsequent requirements that appear in their CastleBarnch/MedProctor personal profile.

- 1. Proof of one Tdap vaccine in adolescence or adulthood is required. If the Tdap vaccine was more than 10 years ago, proof of a Td vaccine within the past 10 years is required.
- 2. Documentation of two MMR vaccines from childhood must be documented.
- 3. Documentation of the 3-dose hepatitis B (HepB-alum) vaccine series, the 2-dose Heplisav-B (HepB-CpG) vaccine series, OR an immune hepatitis B surface antibody titer.
- 4. Hepatitis A and meningococcal vaccines are optional at this time. Documentation should be submitted if they have been completed.
- 5. Each student must undergo 1-Step PPD tuberculosis (TB) testing within six months prior to the start of classes, regardless of bacille Calmette-Guerin (BCG) vaccination status. Alternatively, a QuantiFERON Gold TB test within six months prior to the start of classes is accepted.
   - a. For students with a known positive (≥10mm induration) TB skin test (new or history of), he/she must provide documentation of the positive PPD and have a baseline chest x-ray or QuantiFERON Gold TB test within the 12 months prior to the start of classes. The student must provide documentation of the positive PPD skin test (date administered, date read,
and millimeters of induration), and a copy of the chest x-ray report or QuantiFERON Gold TB test. Students must also complete annual TB Symptom Screening Questionnaire.

- b. Students with a new positive TB skin test (PPD) must be referred to a physician for follow-up.

- 6. Seasonal influenza vaccination is recommended annually.
- 7. COVID-19: all students must meet the COVID-19 vaccination requirements with one of the following:
  - Pfizer (two doses, 21 days apart; booster six months after initial doses)
  - Moderna (two doses, 28 days apart; booster six months after initial doses)
  - Johnson & Johnson (one dose; booster two months after initial doses)

II. Consequences and Responsibilities

- **A. Consequences:** If students do not complete their immunization requirements within one month of matriculation, students will be placed on a registration hold and will be unable to register for classes the next quarter. Once students complete the requirements, the registration hold will be removed. If students are in the process of receiving a vaccination series (e.g. hepatitis B series) after matriculation, students will not be placed on a hold as long as they continue the necessary follow-up to meet the immunization requirements.

- **B. Responsibilities**
  - 1. Students:
    - a. Ensure that immunization requirements are fulfilled prior to matriculation.
    - b. Submit proof of immunizations to CastleBranch/MedProctor prior to matriculation.
    - c. Maintain up-to-date immunizations during their time as students at RFUMS.
    - d. Maintain awareness of upcoming immunization needs.
  - RFUHC:
    - a. Serve as a clinical resource regarding vaccines and immunizations.
    - b. Monitor and report student immunization status (compliant, in-process, non-compliant) to the Division of Student Success and Wellness at RFUMS.
    - c. Ensure coherence between immunization requirements and documentation tracking in CastleBranch/MedProctor.
  - Student Health Leadership Taskforce:
    - a. Determine student immunization requirements and communicate with the Division of Student Success and Wellness at RFUMS about immunization requirements.
    - Ensure that clinical policy supports educational requirements.
    - Update immunization policy as needed according to CDC guidelines.
III. References

Centers for Disease Control and Prevention: https://www.cdc.gov


Immunization Action Coalition: http://www.immunize.org/


Technology

Enrollment Level Identity Verification for All Students

Each student is required to engage in a pre-matriculation background check (provided by University approved vendors) per the University Background Check Policy. During this background check the initial process for identity verification is conducted using multiple forms of identification and a social security number verification which helps to verify the applicant's identity by confirming whether the applicant's Social Security Number matches his/her name, address and Social Security Number data obtained through one of the three major credit bureaus.

Secure Network Account Initiation

Student identity is vetted and upon admission the student must provide answers to security questions about information shared during their application process in order to claim a unique and secure user account on the RFUMS network (also called HelixNet). This network user account allows the student to authenticate to all appropriate University systems that they have been granted access to, including D2L Brightspace, the learning management system. All individual systems are secured in accordance with industry best practices that include utilizing role based access to implement a policy of least privilege.

Important and necessary usage standards are agreed to by the student upon activating their account (RFU End User Account Policy), such as 1) not sharing login credentials, 2) taking personal responsibility for account/computer security, and 3) not abusing the privilege of having an account through actions like copyright violation or inappropriately accessing sensitive information.
Other security features of the HelixNet account include 1) locking an account after multiple failed login attempts, 2) requiring the use of complex passwords, and 3) forcing periodic password changes, and 4) two-factor authentication that requires all users to have access to a physical device (e.g., cellular phone, USB key, hardware token, etc.) to verify their identity. This second factor of authentication further ensures that a student is continuing to validate their identity when accessing University systems.

This secure login system is provided following the admissions verification which uses standard practice guidelines to ensure authentication.

**Online Student Orientation**

Rosalind Franklin University of Medicine and Science (RFUMS) supports a university model for quality teaching by identifying best practices in teaching for graduate healthcare education for both face-to-face and online learners. In order for online learners to be provided with the same knowledge that is provided to new students enrolled in on-campus programs, an online orientation is to be provided for online learners.

All newly enrolled students in online programs must complete an online orientation course within the first two weeks of enrollment in a RFUMS course. This online orientation is to be provided through the learning management system with active administration to ensure completion by students.

**Online Proctoring**

The technologies to verify a student’s identity when taking an online test or quiz, ExamMonitor and Respondus Monitoring, are available to any faculty member in the University.

**Student Identity Verification Measures in Online Courses**

Online courses at RFUMS should contain instructional activities and assessments designed in such a way as to help verify that the student enrolled in the course is the same student who participates in and completes the course. This design may include technological, engagement, or communications attributes which help accomplish this.

Some examples of instructional design elements which may be used are:

- The use of technology to verify a student’s identity when taking an online test or quiz (e.g.- ExamID, Respondus Monitoring and Proctoru).
- The use of an anti-plagiarism tool, such as “Turnitin”, to verify student work is their own.
- The use of “authentic assessment” types of activities and assignments that require active student engagement, such as journal, group projects, portfolios, debates, and discussions.
- The use of multimedia communication that show the person behind the name with a student’s voice or image.
- Requiring several drafts of a paper instead of a writing assignment making it more expensive for a student to use online paper mills.
• The use of a portfolio strategy that allows the instructor to compare various pieces of student work for consistency.
• Participation in program-related practicum activities.

Student Financial Services

Financial Aid
The Office of Student Financial Services (OSFS) is responsible for administering and coordinating aid funds from federal, private and institutional sources. The primary goal of the OSFS is to provide financial assistance to applicants who, without such aid, would be unable to attend RFU.

A variety of financial aid is available to qualified students attending RFU. Questions concerning financial assistance should be directed to the Office of Student Financial Services or online at financial.aid@rosalindfranklin.edu.

For contact information call 847-578-3217 or visit www.rosalindfranklin.edu/admission-aid/financial-services/financial-aid.

Eligibility Requirements and General Application Procedures
To be eligible for financial aid, an applicant must:

- Be a citizen or permanent resident of the United States or other eligible non-citizen.
- Be enrolled at least half-time (4.50-8.99 credit hours) and admitted to a degree-seeking program.
- Not be in default on a Federal Perkins Loan or Federal Direct Loan.
- Not owe a repayment to a grant program.
- Be making satisfactory academic progress per federal financial aid regulations.
- Agree to use any student financial aid received solely for educational expenses.
- Begin attendance in all courses for which aid is received.

The Free Application for Federal Student Aid
Students who wish to be considered for financial aid must complete the Free Application for Federal Student Aid (FAFSA). FAFSAs are available on October 1 of each year.

When completing the FAFSA, it is vital that students consistently report their name, social security number and date of birth. The U.S. Department of Education will verify the information reported with various other federal agencies. If the information does not match, it will delay processing. Additionally, the information reported on the FAFSA must match exactly with the permanent student record at RFU.

The OSFS recommends that students complete the FAFSA online at www.fafsa.ed.gov. RFU’s school code (001659) must be listed; otherwise, RFU will not receive the FAFSA information.
To complete the FAFSA online the student must have a FSA ID in order to be able to sign the form electronically. Students may create a FSA ID at https://fsaid.ed.gov

After receiving your FAFSA, the federal processor will send the student a Student Aid Report (SAR) electronically. The SAR lists all the information submitted on the FAFSA and explains the EFC calculated from that information. Students should review the SAR for accuracy and make any necessary corrections.

**Additional Document Requirements**

In addition to a complete FAFSA, students will be required to complete the RFU Financial Aid Application annually.

If additional information is required, the OSFS will send an email to the student’s RFU email address, directing students to the Checklist available on Self-Service (student portal for online account management). The Checklist will provide detailed information on the required documents that need action on behalf of the student. It is important that all required documentation be submitted with proper signatures in a timely manner as until all required documentation is received and reviewed, the university cannot finalize a financial aid award. Students should return the required documentation within two to four business days from the initial correspondence.

**Determining Financial Need**

For each program the OSFS must determine an estimated cost of attendance (COA) which reflects costs the student may encounter during the academic year. Such expenses may include:

- Tuition
- Fees
- Books and supplies
- Room and board
- Transportation
- Miscellaneous personal expenses

The total COA is not the amount that the student will owe the university for the year, it consists of Direct Costs and Indirect Costs.

- Direct costs include: tuition, fees, health insurance (if applicable), and room and board (only in on campus university housing). These direct costs are paid directly to the university.
- Indirect costs include: books and supplies, transportation, miscellaneous personal expenses, and room and board (for the student not residing in on campus university housing). These costs are costs a student will likely face during the academic year but are not owed to the university; student receives the funds to cover these costs in a form of a refund.
Financial need is determined by subtracting the student’s expected family contribution (EFC) and any other outside resources from the student’s cost of attendance (COA) as per the following formula: “A student must have financial need in order to be eligible for need-based financial aid. Additionally, the sum total of financial assistance a student receives from all sources (grants, scholarships, waivers, loans, work study, etc.) cannot exceed the student’s estimated cost of attendance.”

**Award Notification**

Once the student’s FAFSA and any additional required documents have been processed, the OSFS is able to award the student financial aid. At such time, an Award Notification email will be sent to the student’s RFU email address, directing student to Self-Service in order to View Awards, Accept/Reject Awards, Sign Award Letter, and to Report Outside Awards, if not listed on the student’s awards at the time of receiving the award notification email.

Ideally, the OSFS will begin to process awards for new incoming summer start students in the beginning of April and the beginning of June for new incoming fall start students. Awards for continuing students enrolling in the summer quarter will be processed in mid-April and mid-June for continuing students not enrolling in the summer quarter. However, much depends upon notification from the federal government about funding levels for the various programs.

Please be aware that financial aid awards can be adjusted (increased, decreased or cancelled) by the specific deadline dates noted on the university calendar for the academic year. Awards can be adjusted for a variety of reasons, such as if the OSFS learns of outside financial resources (including tuition waivers and scholarships), if corrections are made to the student’s FAFSA or if the student changes enrollment, grade levels, programs, etc. If an award is adjusted, the student will be sent an email informing student that revised awards are available on Self-Service.

There are several types of special circumstances that can affect a student’s status and aid eligibility during the academic year. Special circumstances must be unaccounted for by the regular awarding process. For example, unexpected vehicle repairs, medical/dental expenses not covered by insurance, cost of student health insurance plan, board exams, one-time computer purchase or daycare costs could potentially be reasons for filing a special circumstances request. Lifestyle choices, such as the purchase of a new car or home and other situations unrelated to higher education, such as credit card debt, are not considered special circumstances. Special circumstances must always be thoroughly documented. If the student experiences a change in financial situation, the student should contact the Office of Student Financial Services.

**Disbursement of Financial Aid and Refunds**

Financial aid will first be credited toward any outstanding balance assessed to the account. If the financial aid disbursed is greater than the total student account balance, Student Accounts will issue a refund to the student. This is done by direct deposit exclusively. Students need to enter their preferred bank information in Student Self-Service.
Students who receive financial assistance and withdraw from the university, or cease to participate in a quarter without formally withdrawing from the university, may be required to repay all or a portion of their award(s) disbursed. Please refer to the Return of Title IV Aid policy for additional information.

**Satisfactory Academic Progress for Federal Aid Eligibility**

Satisfactory Academic Progress (SAP) ensures students are able to complete their academic program in a timely manner while achieving and maintaining compliance with minimum academic standards. Federal regulations mandate that all students are required to conform to SAP standards as they work toward a degree in order for them to qualify to receive financial assistance through all university eligible Title IV Federal Financial Aid programs. Complying with the Rosalind Franklin University SAP policy ensures students complete their academic program in a timely manner while achieving and maintaining compliance with minimum academic standards.

- **Standards of Satisfactory Academic Progress**

  SAP standards (Academic Standing, Pace and Maximum Time Frame, from now on collectively referred to as “Standards”) consist of quantitative and qualitative measurements that are determinants of SAP. The qualitative measurement evaluates the quality (i.e., GPA and academic standing) of the students’ academic work. The quantitative measurement evaluates the Pace by which students are working toward the completion of their program and the Maximum Time Frame required to complete their program.

  - **CGPA and Academic Standing (Qualitative):** All students must maintain a minimum cumulative grade point average (CGPA) or comparable norm and be neither dismissed nor suspended from their academic program, as determined by their program’s specific academic standards policy. All students are also required to achieve a CGPA or comparable norm that is consistent with their program requirement for graduation.

  - **Pace (Quantitative):** Students must be on target to complete their academic program within the set time frame, which is measured by the Pace at which they complete their required coursework. All students must maintain a minimum Pace. To determine if a student is meeting this standard, total cumulative earned credit hours at RFU plus accepted transfer credit hours are divided by the total cumulative attempted credit hours, including accepted transfer credits. A student must successfully complete the designated cumulative minimum percentage of all attempted credit hours at the point of SAP evaluation as determined by the calculation above.

  - **Maximum Time Frame (Quantitative):** All students are expected to finish their degree or certificate program within a maximum time frame, no longer than 150% of the published length of their program.

- **Additional Constraint on Financial Aid Eligibility**

    Students who have completed the academic requirements for a program, but do not yet
have the certificate or degree, are not eligible for federal financial aid funds for that program of study.

- **SAP Evaluation**
  - **Academic Year:** The academic year at RFU consists of summer, fall, winter and spring, payment periods/quarters. Summer begins the academic year and spring concludes it.
  - **Frequency and Timing:** RFU evaluates all students’ academic progress quarterly or annually. As grades are posted, the Office of Financial Aid will review the academic records of all students who are receiving federal financial aid funds to determine if they are meeting the standards. This review will be performed for all students who were enrolled at RFU for the previous academic year. Students returning from administrative leave may follow the appeal policy if consideration for financial aid is desired. All periods of enrollment at RFU will be included in the measurement of satisfactory academic progress. Terms in which the student enrolled but did not receive financial aid are also included in the measurement.
  - **Evaluation:** The Office of Financial Aid will perform an annual or quarterly review of each student’s progress to ensure that students are meeting each of the standards. If it is determined that the student is not compliant with any of the standards, the student becomes ineligible to receive federal financial aid and financial aid eligibility will be suspended.

- **SAP Notification**
  A student not meeting the standards will be notified in writing of their Financial Aid Warning or Suspension after all grades have been posted for their program of study. The notification will include an explanation of the standards evaluated and instructions on how to proceed. Written notification will be sent electronically via their RFU email account and/or mail via the last known mailing address according to the Registrar’s records.
  - **Financial Aid Warning:** Financial aid eligibility will be reinstated for one quarter. No SAP appeal is necessary. During the warning quarter, students are expected to improve their academic standing and degree progress to meet standards of SAP at the end of the quarter. Students who fail to achieve SAP at the end of the quarter will be denied financial aid beginning the following quarter. A SAP Appeal to request financial aid consideration will be required at that time.
  - **Financial Aid Suspension:** Students who do not meet the standards at the time of the quarterly/annual evaluation will be ineligible to receive federal financial aid funds for the subsequent quarter (unless they submit an appeal and are placed on financial aid probation). Financial aid is suspended for a student who fails to meet the standards of SAP and:
    - Has not submitted an appeal of their status or has had their appeal rejected by the appropriate review committee;
    - Fails to regain eligibility by meeting the minimum standards after a successful appeal and completion of the probationary period;
    - Has not fulfilled the requirements set forth in their Academic Plan.
• Students with financial aid eligibility suspended may either:
  ● Remediate any of the standards that are non-compliant while not receiving federal, institutional or need-based financial aid or
  ● Submit a SAP appeal.

If at any time during a non-review period, a student who has been suspended from financial aid eligibility has remediated any of the standards that are non-compliant (e.g., due to a late grade change or completing an incomplete course), that student must contact the Office of Financial Aid to request a review of their academic record and reinstatement of their financial aid eligibility. **It should not be assumed that reinstatement is automatic.**

Unless academically dismissed, students may be permitted to enroll at Rosalind Franklin University while financial aid is suspended. Students denied federal financial aid may continue attending RFU by funding their education themselves. It is the student’s responsibility to monitor their academic progress and to be aware of their program requirements and SAP standards.

• **Financial Aid Probation:** Financial Aid Probation is a status assigned to any annually reviewed student who fails to meet the standards and has successfully appealed their Financial Aid Suspension. If placed on Financial Aid Probation, students will be required to follow an approved Academic Plan in order to receive federal financial aid for one quarter/term and have their progress be evaluated at the end of the quarter/term. Students who meet all standards or the requirements outlined in their Academic Plan will remain eligible for federal financial aid. Students who fail to meet the standards or the requirements outlined in their Academic Plan will again be suspended from financial aid eligibility and will be ineligible for federal financial aid going forward. Only financial aid-eligible applicants and recipients will be placed on Financial Aid Probation. Students who successfully appeal their financial aid eligibility and are approved will be placed on Financial Aid Probation for the current or subsequent quarter as requested by the student in the appeal process.

• **Discretionary Review of SAP in Non-Annual Review Periods:** The Office of Financial Aid and the Registrar may, at their discretion, conduct SAP assessments at any time throughout the academic year. If upon performing the analysis the financial aid or registrar staff identifies that a student may be at risk of failing to meet all standards, the identified student(s) may be sent a courtesy notification via their RFU email address. If a discretionary SAP assessment is performed and risk is identified, a flag (not to be confused with Financial Aid Suspension or probation) will be placed on the student’s account/record to notify the Financial Aid department, the Registrar and the student’s academic advisor that the student is at risk of losing federal financial aid eligibility. Students who receive a courtesy notification letter will continue to have their federal financial aid normally processed by the Office of Financial Aid.
for the term during which the discretionary review was completed and until they fail to meet the standards of Satisfactory Academic Progress as determined by the annual review period described above.

- **Appeal Process**
  - Students who become ineligible to receive federal financial aid for failure to meet the standards, and have been notified of the Financial Aid Suspension, have the right to make a written appeal to the appropriate committee. Students who appeal must demonstrate all of the following:
    - That failure to meet the minimum standard was caused by extreme or unusual circumstances beyond their control (documentation must be supplied);
    - That they have resolved the issue(s) that caused the deficit and
    - That the issue(s) will not affect their performance in the future.
  - **Monitoring the Status of an Appeal:** Once an appeal is submitted to the appropriate committee for a decision, that appeal will be heard at that committee’s next meeting. All decisions are final. If a decision has not been made by the time tuition is due, it is the student’s responsibility to contact the Office of Financial Aid to discuss the alternative payment options. Below is a list of the potential appeal statuses that could be determined by the committee:
    - **In-Progress:** Appeal has been received, but not reviewed.
    - **Tabled:** Appeal has been reviewed, but the committee has deferred the appeal until it receives additional information.
    - **Approved:** Appeal has been approved and the student has been placed on Financial Aid Probation.
    - **Denied:** Appeal was not approved based on the information that was provided. The student is no longer eligible to receive federal financial aid.
  - **Limit of Appeals:** Students may not initiate an appeal using the same extraordinary and extenuating circumstance three times.
  - **Regaining Eligibility for Financial Aid Through Self-Correction:** Students who are denied federal financial aid on the basis of not meeting the standards, may regain eligibility by becoming compliant with all of the standards while studying at their own expense. This is known as self-correction.
    It is the student’s responsibility to notify the Office of Financial Aid when they have self-corrected their SAP-related issue(s). The Office of Financial Aid will then conduct a review to confirm that the student is meeting all Standards at that point in time.
  - **Late Grade Posted or Grade Change:** Students whose financial aid eligibility has been suspended or those on Financial Aid Probation who have a grade posted late or changed must notify the Office of Financial Aid to have their SAP re-evaluated. It is the responsibility of the student to
notify the Office of Financial Aid of these circumstances. There is no automatic process to remove the Financial Aid Suspension or Probation status for students. If no notice is provided, the student’s SAP status will remain unchanged and will be re-evaluated during the next review.

- **Program Changes:** Students who switch programs while at RFU will be evaluated based only on the standards for the program for which they are currently active. Students who are not compliant with any standards prior to switching programs or based on their new program may be required to submit a SAP appeal form before they are eligible to receive any federal financial aid. Failure to submit an appeal may result in the student not being eligible for federal financial aid. It is the student’s responsibility to recognize that a program change may result in a Financial Aid Suspension.

- **Multiple Programs:** For students simultaneously pursuing two (or more) graduate or professional degrees, the measurement of their Minimum 67% Pace of Completion and Measurement of Quality is still based on their Total Attempted Hours. Their Maximum Total Attempted Hours will be calculated using the degree with the greater number of required hours.

- **Academic Plan:** If an appeal is approved, the student will be placed on Financial Aid Probation and given an Academic Plan. An Academic Plan is a written agreement between the student and the student’s adviser that may extend the student’s eligibility for federal financial aid for one quarter/term during a designated probationary period. The Academic Plan specifies requirements (i.e., minimum course completion ratio, CGPA, reduced course load or enrolling in specific courses) that the student must meet and exceed each quarter/term to maintain or regain federal financial aid eligibility. A student who does not meet these standards will again be suspended from financial aid eligibility and will be ineligible for federal aid in future quarters/terms until the student does meet the standards.

- **Effect of Withdrawals, Tentative Grades, Remediation and Transfer Credits**
  - **Withdrawal:** Students are given a W (Withdrawal) when they officially withdraw from a course. The course will only appear on the transcript if the student withdraws after the end of the add/drop period as per the university’s academic calendar. A W grade is not calculated into the GPA, attempted credits or earned credits, when dropped on or before the add/drop period. After the add/drop period, a W grade is calculated into the attempted credits, but not calculated into the GPA or earned credits. Withdrawn courses recorded on the student’s permanent academic transcript are included in the Pace and Maximum Time Frame calculations as attempted but not satisfactorily completed credits.
  - **Incompletes:** Courses that are assigned an incomplete grade are included in the attempted credits but not earned credit hours for Pace and Maximum Time Frame measures. They are entered as attempted but not satisfactorily
completed credits and are not included in the minimum CGPA. A students’ status may change once a final grade is recorded. It is the responsibility of the student to notify the Financial Aid Office when a grade has been entered as final.

- **Pass/Fail:** All credits for Pass/Fail course attempts will be counted as attempted credits. Only P grades will count as satisfactorily completed credit hours in the quantitative measures.

- **Remediation:** For purposes of financial aid, students may be permitted to retake courses in which the student received a failing grade or its equivalent which is dependent on the academic requirements of the program in which the student is enrolled. Each time a course is attempted, it is considered an attempt when calculating the Pace of completion and Maximum Time Frame measures, regardless of whether the course is subsequently repeated for a better grade.

Students are only allowed to receive federal financial aid for one repeat of a previously attempted course (for the first time only) in a term-based program, including when the student is retaking a passed class due to failing other associated coursework. Any grade that is higher than an F, or its programmatic equivalent, is considered passing for this purpose regardless of the school or program policy/requirements. If after that one allowable repeat, a satisfactory grade is not achieved, the student may not be eligible to receive federal financial aid for additional repeats of the same course. Students may not appeal their federal financial aid eligibility if deemed ineligible for this reason.

- **Transfer Credits:** For purposes of financial aid, only transfer credit hours officially accepted for the student’s program of study will be automatically counted in the attempted and successfully completed credit hours toward the quantitative (Pace of completion) and Maximum Time Frame. Various programs at Rosalind Franklin University may have different standards and requirements regarding acceptability of transfer credits, and calculations will be based on the program in which the student is enrolled.

**Types of Assistance**

**Federal**

**William D. Ford Federal Direct Unsubsidized Loans**

Direct Stafford Unsubsidized Loans are offered to any student who has completed the FAFSA. A student will qualify for a Direct Unsubsidized Loan regardless of their expected family contribution (EFC).

Interest on a Direct Unsubsidized Loan accumulates while a student is enrolled in graduate courses. Interest that is not paid while the borrower is enrolled will be capitalized and added to
the principal at the time of repayment. Direct Unsubsidized Loans need to be repaid after a student has graduated or drops below half-time enrollment (i.e., 4.50-8.99 credit hours).

**William D. Ford Federal Direct Graduate PLUS Loan**

The Direct Grad PLUS Loan, also called a Direct Graduate PLUS Loan, is a student loan available to students attending graduate school and professional school. It offers a fixed interest rate and flexible loan limits.

Eligibility for the Direct Grad PLUS Loan does not depend on expected family contribution (EFC), but students need to complete the FAFSA to qualify and also pass a simple credit check.

Interest on a Direct Grad PLUS Loan accumulates while a student is enrolled in graduate courses. Interest that is not paid while the borrower is enrolled will be capitalized and added to the principal at the time of repayment.

The Direct Grad PLUS Loan allows students to borrow up to the full annual cost of attendance (COA) minus other financial aid received (scholarships, fellowships, grants, federal student loans or private student loans).

**Federal Work-Study Program (FWS)**

The Federal Work-Study program provides jobs for students with financial need, allowing them to earn money to help pay for educational expenses. The program is administered through the Office of Student Financial Services.

Applicants must demonstrate financial need, complete the I-9 form at the time of hiring, complete IRS forms and submit all financial aid information required by the Office of Student Financial Services.

Applications are available through the Office of Student Financial Services. All applications, payroll, timekeeping procedures and job assignments are handled through the specific supervisor or department for which a student works. Jobs range from typical library and office work, to assisting in labs and participating in research.

Federal Work-Study wages are $10 to $15 per hour. The total FWS award depends on when a student applies, the level of need, the amount of other aid they will receive, the availability of funds and the time requirements of the job. The amount of the FWS award is calculated as part of a student’s overall financial aid award and therefore may reduce the need for other funds. The total hours may not exceed 15 per week when classes are in session or 35 hours per week during vacation periods.

Students are paid on a bi-weekly basis from RFU.

**Veterans Assistance**

Incoming veterans are advised to contact the Registrar’s Office at least 45 days prior to the start of the quarter to complete paperwork to receive their benefits. Veterans receiving benefits must complete an RFU Enrollment Certification Request Form each quarter and notify the university
of all changes in enrollment. Inquiries concerning educational benefits for veterans and their dependents may be directed to the Registrar’s Office.

**Student Accounts**

**Tuition and Fees**

Tuition and fees are subject to change. The official charges are those billed by Student Finance during the tuition and fee payment period for each quarter. For the most recent tuition and fee rates, see the Cost and Fee page on the RFU website at [https://www.rosalindfranklin.edu/admission-aid/financial-services/costs-fees](https://www.rosalindfranklin.edu/admission-aid/financial-services/costs-fees)

Payment of all charges on the student’s account are due by the published due dates. For the most recent tuition and fee due dates, see the Student Finance page on the RFU website at [https://www.rosalindfranklin.edu/admission-aid/financial-services/billing/tuition-due-dates/](https://www.rosalindfranklin.edu/admission-aid/financial-services/billing/tuition-due-dates/)

Any student who pays less than the total amount due on the payment due date will be assessed a late fee on the unpaid balance. The late payment fee will be assessed in accordance with the RFU Late Fee and Collection Policy. To review this policy, please go to the Division of Student Success and Wellness page under RFU Policies & Procedure on InSite. The direct URL is [https://insite.rosalindfranklin.edu/AcadPrgmsStuSuprt/SEM/Pages/SEM_Policies.aspx](https://insite.rosalindfranklin.edu/AcadPrgmsStuSuprt/SEM/Pages/SEM_Policies.aspx)

**Statement of Financial Responsibility**

All students must review and agree to the university’s Statement of Financial Responsibility annually. This must be done before registering for any coursework.

Within this agreement, the student agrees they are responsible for any charges that are incurred as a result of registering for classes, other optional services that the student shall utilize (such as university health insurance, university housing, etc.) and fines or charges incurred as a result of missing required deadlines. The student also further agrees that they fully understand and agree to the terms and conditions of this statement.

All students are responsible for all charges incurred for the quarters in attendance. Any student who withdraws from the university or a course must withdraw in accordance with the policies and procedures set forth by the university. Charges will be adjusted and any balance due must be paid before leaving the university. Any student who leaves the university with their account not paid in full will be referred to an outside collection agency for possible legal action. The student is liable for the outstanding balance and collections costs. The student’s credit rating will be affected.

To review the Statement of Financial Responsibility, please visit the Student Finance page on InSite, [https://insite.rosalindfranklin.edu/AcadPrgmsStuSuprt/SEM/StuAccts/Pages/Student-Accounts.aspx](https://insite.rosalindfranklin.edu/AcadPrgmsStuSuprt/SEM/StuAccts/Pages/Student-Accounts.aspx)
Late Fees and Academic Restrictions

The due date for all student charges is the Thursday in the first week of each term. Students who do not pay their balance in full by this date will be charged a 1.5% interest penalty on the value of their outstanding balance.

It is the student’s responsibility to check their account status via Student Self-Service and notify the Office of Student Services of any discrepancies, unposted Financial Aid, or pending third-party payments.

Any accounts with an outstanding balance 7 days after the term due date will have a Financial Hold placed on their account and will be subject to academic sanctions, which will include the following:

- A financial hold which will prevent registration in future terms unless satisfactory arrangements have been made with the Office of Student Finance.
- University documents relating to academic performance, formal transcripts, diplomas and certificates will be withheld.
- A graduation hold will be placed.

Any accounts that continue to have an outstanding balance 14 days from the Term Due Date may be subject to the following:

- Having their enrollment reversed for the term.
- Access to coursework and all other educational and university systems will be blocked.
- A graduation hold will be placed.
- Graduation hold.

Notification of financial holds and enrollment reversals will be reported to the student’s department or program.

The Office of Student Financial Services will not impose any penalty or restriction if the student is engaged in good faith discussions and active with resolving the account balance.

Collection Process for Non-Active Students

If a student separates from the University, any balances will be due immediately. The Office of Student Finance will notify you in writing of any outstanding balance within 30 days of your separation.

Contact Student Accounts to:

- Resolve your delinquent balance.
- Set-up payment arrangements and avoid further collection action.
- Discuss your financial difficulties and recommend repayment options.

If any outstanding balance remains or satisfactory payment arrangements have not been made after 30 days, your account will be in default. Any account that is in default may be referred to
an external debt collection agency and the student will be liable for all costs incurred from this action. Also, your account will be reported to credit bureaus as delinquent.

**Disputing a Late Fee**

Students can submit an appeal about their late fees to the Student Finance Committee. All disputes must be submitted via the electronic appeal form within the term the late fee occurred in.

Disputes will be reviewed and a decision made within 30 days, at which time the student will be notified in writing via their University student email address. Failure to submit the dispute within the term it was assessed indicates that the student is aware of the fee and accepts its assessment.

NOTE: Disputing these amounts does not guarantee that the amount will be removed. Submitting an appeal form for removal only means that an amount is being disputed and that the committee will review the student’s account to evaluate the disputed amount’s legitimacy. If the committee deems the amount to be valid, the student will be required to pay it.

**Exceptions**

Late fees will not be assessed if the student:

- Has made payment arrangements with the Student Finance Office.
- Has pending Financial Aid (awaiting disbursement) that covers full or remaining balance.
- Has a pending outside scholarship or loan credit on their account that covers full or remaining balance.
- Is a recipient of a tuition waiver which has not yet posted to their account.
- Is a recipient of funding through the GI Bill, Armed Forces or VA benefits which have not yet posted to their student account.

**Tuition Refund Policy**

The RFU Tuition Refund Schedule applies to changes in registration after initial registration. Tuition refund amounts for dropped courses, withdrawal, or approved leave of absence are determined by the enrollment action of the student and their school/program.

A student who drops a course, withdraws, or is approved for a leave of absence from RFU may be eligible for a refund of their tuition charges. Leave of Absences or Withdrawals from an academic program must be reported to and approved by the Dean or Dean’s designee. The following is the RFU tuition refund schedule:

- 100% refund of tuition within the first week of the quarter
- 75% refund of tuition within the 2nd week of the quarter
- 50% refund of tuition within the 3rd week of the quarter
- 25% refund of tuition within the 4th week of the quarter
- 0% refund of tuition after the 4th week of the quarter
Return of Title IV Funds Policy

Federal law and regulations require Rosalind Franklin University to calculate a return of Title IV funds for any student who withdraws, takes a leave of absence or does not complete an enrollment period or payment period, and who has received financial aid through the federal Title IV programs. This calculation is performed using a specific formula required by the U.S. Department of Education.

Title IV programs include Direct Unsubsidized loans and Graduate PLUS loans. Title IV funds are awarded to a student under the assumption that the student will attend school for the entire enrollment period or payment period for which the aid is awarded. When a student withdraws, or takes a leave of absence the student may no longer be eligible for the full amount of Title IV funds received. The return of Title IV funds calculation is based on the percentage of the enrollment period or payment period completed and the amount of Title IV aid disbursed. The return of Title IV funds calculation is separate and different from the calculation for refund of Tuition and Fees.

The calculation for return of Title IV funds is based upon the official withdrawal date determined by the Registrar's Office. The number of days completed is divided by the total number of days in the enrollment period or payment period to identify the percentage of time the student has completed. This will be the percentage of aid actually earned by the student at the time of withdrawal.

If 60% or more of the enrollment period or payment period is completed, there is no return of the Title IV funds for that period and the student is considered to have earned 100% of the Title IV funds received.

If the percentage is less than 60%, this percentage is multiplied by the total amount of Title IV aid to arrive at the amount of earned aid. The difference between the amount of earned aid and the total amount of Title IV aid is the amount of unearned aid.

The amount of unearned aid the University is responsible for returning

The institutional charges (tuition, fees, etc. for the entire enrollment period or payment period) are multiplied by the percentage of unearned aid to determine the amount the University is responsible for returning. Any amount required to be returned by the University must be done no later than 45 days from the date of determining the student withdrew or has taken a leave of absence.

The amount the school is responsible for returning is compared to the total amount of unearned aid; the lesser amount is then returned to the student’s loans in the following order: Direct Unsubsidized loan, then Graduate PLUS loan. This amount is charged to the student’s account. Depending on the results of the Tuition Refund Policy, it is possible that the student would then owe the University for the remaining unpaid portion of tuition and fees.
The amount of unearned aid the student is responsible for returning

The student is responsible for returning any portion of the unearned aid that is not returned by the University. This is in addition to any refund money from the University that is required to be returned. For any unearned aid that came from Title IV loans, the student does not have to return the funds immediately, but instead is responsible for repaying those funds according to the terms of the promissory note.

A student's failure to return funds they are not eligible to receive will result in the student being ineligible for further financial aid. The school and the U.S. Department of Education may also seek legal action against the student to collect any funds the student is not entitled to retain.

Post-Withdrawal Disbursements

At the time of withdrawal, if less Title IV aid has been received than the amount earned, the student may be eligible to receive additional funds in a post-withdrawal disbursement. In this case the Office of Financial Aid will inform the student of this eligibility within 30 days from the date of withdrawal or leave of absence. The student may then request the disbursement of these additional funds. The student may also decline some or all of the funds to prevent the incurrence of additional debt.

Registration/Grades

Add/Drop

Students may adjust their schedules until the end of the course add/drop period of each quarter at RFU. The course add/drop period will last until the end of week one of the quarter.

If a student withdraws from a course during the first week of the quarter, there will be no course or grade recorded on the transcript. A student withdrawing from a course after the first week receives a W for the course in which the student was enrolled. A student may withdraw from a course up to the tenth week of the quarter; however, a student may not withdraw from a course during the two weeks prior to the final examination or final project. Students withdrawing after the tenth week or during the two weeks prior to the final examination will receive regular grade designations as determined by the instructor(s).

All students who register for a course and neither complete the course objectives nor officially withdraw according to any one of the procedures described in this document will be graded F in that course and must assume all financial obligations associated with the course.

Holds

A hold is a restriction placed on a student’s account that may prevent a student from receiving university services. A hold will not be removed until it is resolved with the department that placed the hold on the account.
Common Reasons for Holds

<table>
<thead>
<tr>
<th>Hold Type</th>
<th>Reason</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Financial Services</td>
<td>Non-Payment of Fees and Charges</td>
<td>Financial Aid Disbursement withheld. Not allowed to register. Transcript and diploma withheld.</td>
</tr>
<tr>
<td>Registrar</td>
<td>Missing Required Documentation</td>
<td>Not allowed to register. Transcript and diploma withheld.</td>
</tr>
<tr>
<td>Registrar Immunization</td>
<td>Immunization Non-Compliance</td>
<td>Not allowed to register. Access to Brightspace revoked. Transcript and diploma withheld.</td>
</tr>
</tbody>
</table>

Registrar and Financial Holds

Registrar and Financial holds prevent students from receiving the following as defined by type of hold:

- Registering for courses
- Grades
- Transcript requests
- Graduation (diploma issuance)
- Accessing Brightspace
- Financial Aid Disbursement

All financial holds will result in a registration hold being applied to the student’s account. For Registrar and Financial holds, notification will be made to the academic program concerning the hold.

Students can view their holds on Self-serve. The student must contact the department that placed the hold on their account in order to make arrangements to have the hold removed.

Grade Submission

All final grades must be completed and submitted to the Registrar’s Office using Web Advisor/Self-Service on or before the grading deadline to ensure procedures associated with student academic performance, graduation, verification, and financial eligibility can be accomplished within required regulatory deadlines.

At the end of each quarter, grades are submitted to the Registrar by faculty members. Late submission of grades will result in restrictive academic actions that may impact a student’s financial aid, graduation, and verifications.

Grade Submission Deadlines:

- Final non-clinical grades are expected no later than five business days after the course ends or at the end of the academic quarter.
- Clinical experiential coursework grades are expected no later than four weeks after the end of a course for official reporting purposes.
- Final grades for students who are eligible for graduation must be submitted one week prior to the date of graduation.
- Students will be able to view their grades one business day after submission.

**Grading**

**General Grading System**

The university system for grading is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>High Achievement</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Above Average Achievement</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Average Achievement</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure</td>
</tr>
</tbody>
</table>

Grades without Associated Grade Points:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Pass</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
</tr>
</tbody>
</table>

Other status notations:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Honors</td>
</tr>
<tr>
<td>HP</td>
<td>High Pass</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>PP</td>
<td>Pass Proficiency Exam</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>#</td>
<td>Graded at Sequence End</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
</tr>
<tr>
<td>NR</td>
<td>Needs Remediation</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit given</td>
</tr>
<tr>
<td>CT</td>
<td>Credit given</td>
</tr>
<tr>
<td>AU</td>
<td>Audit</td>
</tr>
</tbody>
</table>

Definitions:

Failure (F): Denotes that a student does not demonstrate competency or does not complete the course or clerkship requirements at a satisfactory level as outlined in the syllabus.

Honors (H): Denotes select podiatry courses and medical extramural courses in which a student has been given the distinction of honors.

High Pass (HP): A designation which may be assigned by some clinical sites; for third-year CMS students only.

Withdrawal (W): The formal termination of course registration for a quarter.

Pass Proficiency Exam (PP): Denotes that the student has successfully passed a proficiency exam for a specific course and is reported to the Registrar’s Office (SCPM and CMS).

Incomplete (I): A temporary notation that a grade cannot be determined because the student has been unable to complete part of the course due to extenuating circumstances.

Graded at Sequence End (#): Courses longer than one quarter will appear on the transcript (with corresponding hours from that quarter) with the # sign for every quarter through which the
course ran, except the last quarter of the course. Only the last quarter will then give the final grade for the entire course, with the cumulative total hours for all quarters over which the course ran.

In Progress (IP): Assigned to a course which is currently in progress.

Needs Remediation (NR): A temporary notation that a grade cannot be determined because the student has been unable to pass part of the course requirements.

No Credit given (NC): No credit is recorded.

Credit given (CT): Credit is recorded.

Audit (AU): Enrollment for a course whereby the student does not earn academic credit. Written permission of the appropriate department chair and/or dean is required. Tuition and fees are applicable.

**Grade Point Average (GPA)**

Only courses graded on an A-F basis are used in calculating GPA. Courses taken as Pass/Fail, Pass Proficiency Exam and Audit are not included. The GPA calculation never includes transfer work from other colleges or universities.

To calculate GPA for one term:

1. Multiply the point value of the letter grade by the number of credit hours. This will result in the grade points earned (quality points).
2. Total the credit hours for the term.
3. Divide the total quality points by the total credit hours. The result is the GPA for the term.

To calculate the cumulative GPA:

1. Multiply the point value of the letter grade by the number of credit hours. The result is the grade points earned (quality points earned from all terms).
2. Total the credit hours from all terms.
3. Divide the total quality points for all terms by the total hours for all terms. The result is the cumulative GPA.
4. Both grades recorded for repeated courses will be used in the GPA calculation.

**Units of Credit**

Academic work at RFU is measured by units of credit. RFU uses the quarter system to measure the length of a term. The quarter system is generally 10-12 weeks of class including final examinations. In conjunction with the letter grade a student receives from the course instructor, units of credit give a fairly accurate evaluation of the amount of time that has been devoted to a given subject.
The number of credit hours assigned to a course is an approximation based on average student workload, which entails lecture, laboratory work and clinical/internship work.

All classes offered for credit at RFU are equated as a standard credit hour. One credit hour is equivalent to one hour (50 minutes) of lecture per week or two hours per week for laboratory, clinical experience or small-group discussion. Courses may last for one or more quarters. Grades are reported at the end of each course.

**Course Numbering System**

500 Graduate/Professional level courses first year
600 Graduate/Professional level courses second year
700 Graduate/Professional level courses third year
800 Graduate/Professional level courses fourth year

**Change of Grades**

Once grades have been submitted to the Registrar’s Office, final grades may be changed for the following reasons:

- Calculating error in computing the grade
- Posting the wrong grade
- Replacing an I or NR notation
- Posting a grade if no grade was submitted
- Re-evaluation of the previous grade
- Submission of a new grade after a remediation exam/project is satisfied

When corrections need to be made, an official Change of Grade form must be sent directly to the Registrar’s Office.

A previous grade cannot be changed to a W (official withdrawal), if the student had a non-academic emergency. The student should file a petition for withdrawal with the Registrar’s Office.

Changes to previously recorded grades must be submitted within one calendar year following the end of a term during which the student was registered for the course. Changes must be initiated by the instructor on a Change of Grade form, signed by the instructor and the department chair, and then submitted to the Registrar’s Office for review. A reason for the requested change must be provided before the request will be reviewed.

After one year or when the student graduates, grades are considered final. Any requests for a change of grade after the one year will require documentation describing the change and why the Change of Grade form was not filed during the appropriate period.

Grades will not be changed following a student’s receipt of a degree or permanent departure from RFU.
Incomplete

Incomplete (I) is not a grade, but a notation that a grade cannot be determined because the student has been unable to complete part of the course due to extenuating circumstances. Extenuating circumstances must be documented and reviewed by the course/clerkship director and/or the department chair. This notation is not to be used to denote unsatisfactory performance.

A notation of I will be replaced by a grade if a student makes up the missing material and/or takes the necessary examination(s) as approved by the department, within one calendar year, but otherwise will be changed to an F after one year or at the time of graduation.

Incomplete (I) may be given only in the following circumstances:

- The student’s work to date is passing.
- There is an extenuating circumstance which legitimately prevents completion of required work (appropriate documentation is required).
- Required work may reasonably be completed in an agreed-upon time frame (typically by the end of the next quarter).
- The incomplete is not given as a substitute for a failing grade.
- The incomplete is not based solely on a student’s failure to complete work or as a means of raising their grade by doing additional work after the grade report time.
- The student initiates the request for an incomplete grade before the end of the academic term.

The following provisions for Incomplete (I) apply:

- It is the responsibility of the instructor to establish the terms of the Incomplete. The Registrar will follow-up with the department on the status of Incompletes on a quarterly basis. Instructors are required to submit a Petition for Incomplete Grade to the Registrar detailing the terms of the Incomplete when the Incomplete is assigned for the purpose of tracking.
- A final grade to replace the Incomplete must be submitted within one calendar year from the date the Incomplete was recorded. The course work may be completed while the student is not enrolled.

A notation of I will be replaced by a grade when/if a student has made up the missing material and/or taken necessary examination(s) as approved by the department. An Incomplete does not calculate into the grade point average.

An Incomplete will appear on the transcript until a final grade is submitted to replace it, for up to one year. After one year, or at the time of graduation (whichever is earliest), an Incomplete will change to F and the F grade will affect the GPA.

An Incomplete will not be considered passing for purposes of determining academic standing, federal financial aid eligibility, or other purposes.
An Incomplete should not be assigned when it is necessary for the student to attend additional class meetings to complete the course requirements. Students who receive an Incomplete in a course cannot register for a future offering of the course to remove the I designation.

**Remediation**

Needs Remediation (NR) is not a grade, but a notation that a grade cannot be determined because the student has been unable to pass part of the course requirements.

A notation of (NR) will be replaced by a grade if a student makes up the required material and/or passes the necessary examination(s) as approved by the academic program, within one calendar year, but otherwise will be changed to an F after that year or at the time of graduation.

**Needs Remediation (NR) may be given only in the following circumstances:**

- The course is structured for remediation in the course syllabus.
- The student has not passed all standard requirements for the completion of the course.
- The student has met all criteria to be eligible for remediation.
- Successful remediation occurs within one calendar year.

**The following provisions for Needs Remediation (NR) apply:**

- A final grade to replace the Needs Remediation (NR) must be submitted within one calendar year when the NR was recorded.
- A course that is structured for remediation must include the following in the syllabus: 
  Eligibility criteria for remediation, the process for remediating, the remediation grading outcomes, and the maximum number of attempts to remEDIATE.
- Remediation should take place at the earliest possible opportunity as approved by the academic program. The Registrar will follow-up with the department on the status of Remediation on a quarterly basis.
- An expiration date must be included when recording the NR grade.

A notation of NR will be replaced by a grade when/if a student has made up the required material and/or taken necessary examination(s) as approved by the department.

Needs Remediation (NR) does not calculate into the grade point average.

Needs Remediation (NR) will appear on the transcript until a final grade is submitted to replace it, up to one calendar year. After that year, or at the time of graduation, a Needs Remediation (NR) will change to F and the F grade will affect the GPA.

Needs Remediation (NR) will not be considered for purposes of determining academic standing, federal financial aid eligibility, or other purposes.

Remediation may be taken outside the University when allowed in the course syllabus. Post remediation, the instructor must complete an assessment of student learning competencies. A note will be added to the transcript explaining any remediation outside the University.
Remediation is not the same as a Course Repeat (or Retake). A course repeat will have a final grade recorded for both attempts of the same course.

**Continuous Enrollment**

Students are required to maintain continuous enrollment from their first quarter of registration until completion of all degree requirements with the exception of school approved breaks or approved leaves. Students who maintain continuous enrollment are subject to the degree requirements and academic policies in place at their date of matriculation as communicated by the university catalog. Degree requirements may be changed at the discretion of the University when professional requirements or educational standards change and are communicated accordingly.

The continuous enrollment requirement will be waived for students who are granted an official leave of absence, although they retain matriculated status (per LOA policy).

Students who fail to maintain continuous enrollment or fail to receive approval for a leave of absence must reapply for admission, and are subject to all admission requirements and criteria at the time of re-application. Decisions for re-enrollment are made by the academic department. Students may be subject to changes in the degree or additional requirements as deemed by the program.

**Leave of Absence**

RFU expects students to maintain continuous enrollment in an academic program with the exception of scheduled breaks. However, at times it may be necessary or desirable for a student to take a leave of absence. All leave of absence requests must be approved by the appropriate dean or dean’s designee. Individual leave of absences are granted for no more than one year. In special circumstances a leave may be extended if requested in writing and approved prior to the end of the initial leave of absence. Maximum approved leave of absence time may not exceed two years. Approved time does not have to be consecutive. If the leave of absence exceeds two years, the student will be involuntarily withdrawn and may re-apply for admission.

Students on leave of absence retain their matriculated student status. Academic program and degree requirements may change during a student’s leave of absence. Once the student has been approved for return, it is at the discretion of the dean or dean’s designee to define the program and graduation requirements in accordance with degree requirements at the time of the leave initiation or the requirements at the time of return (if they have changed). In exceptional circumstances, the requirements may reflect a combination thereof in order to satisfy all requirements for degree. The Continuous Enrollment Policy will help advise as to the enrollment effects of Leave of Absence. Suspension, dismissal or expulsion overrides a leave of absence.

- **Voluntary Leave of Absence**
  A student may request a voluntary leave of absence (LOA). Students requesting voluntary leaves of absence must comply with this policy, both in making requests for such leaves, and prior to returning from approved leaves of absence. Any RFU student contemplating a voluntary leave of absence should consult with their appointed Leave of Absence
Coordinator, Dean/Dean’s designee to discuss the necessary application procedures.

Students on an approved voluntary leaves of absence retain their Student Identification card and access to their email account. Students may visit the campus and any other University-owned facilities. Exceptions may be made under specific circumstances.

- There are five types of voluntary leave of absence:
  - **Medical Leave of Absence**
    Students who must temporarily interrupt their progress toward a degree due to a physical or mental health need must petition for a medical leave of absence. All medical leave of absence requests will be assigned to the RFU ADA Coordinator who will serve as the LOA coordinator.
  - **Academic Leave of Absence**
    Students who must temporarily interrupt their progress toward a degree in order to maintain appropriate academic progress must petition for an academic leave.
  - **Personal Leave of Absence**
    Students who wish to temporarily interrupt their progress toward a degree for a non-medical or non-academic reason must petition for a personal leave of absence.
  - **Educational Leave of Absence**
    Students who wish to temporarily interrupt their progress toward a degree to pursue academic research at an approved institution or pursue a combined degree at RFU must petition for an educational leave of absence.
  - **Military Leave of Absence**
    Students who need to temporarily interrupt their progress toward degree to fulfill military obligations should petition for a military leave

- In emergency cases, where the student is unable to initiate the request, the Associate Vice President (AVP) of Student Affairs may initiate and process a leave of absence in conjunction with the student’s Dean or Dean’s designee. In such cases, supporting documentation may be accepted in lieu of the student signature for a voluntary Request of Leave of Absence form.

- **Involuntary Leave of Absence**
  The university may place a student on an involuntary leave of absence when a student is unwilling or unable to request a voluntary leave of absence and when there is evidence to suggest that:

  - The student poses a significant threat of imminent or serious harm to self, others, or University property.
  - The student impedes the educational activities of other members of the campus community. Examples of such behavior include being disruptive in the educational environment or having needs which exceed the level of care and supervision that the University community can provide.
  - The student has a medical reason that prevents return to the University in the foreseeable future and is unable to document and request for leave.
The student fails to meet enrollment requirements such as providing documentation, completing unfulfilled academic requirements, or having unpaid tuition in violation of the tuition policy.

Involuntary leave of absence is initiated by the Associate Vice President of Student Affairs in conjunction with the Dean or Dean’s Designee.

An involuntary leave of absence may be executed at any time. If a student is placed on an involuntary leave, the RFU Student Identification card must be returned to or deactivated by the Department of Campus Safety and access to his or her email and/or computer account may be suspended at the discretion of the Associate Vice President of Student Affairs. The student may visit the campus and any other University-owned facilities only with the written permission of the Associate Vice President of Student Affairs. Such permission may be set forth in the letter notifying the student of the involuntary leave. Otherwise, the student must be off the campus during the involuntary period of leave.

A student is notified in writing that they are placed on involuntary leave. The student may petition the AVP of Student Affairs for reconsideration and may appeal to the Vice President of Student Success and Wellness for final decision.

**University Withdrawal**

A University withdrawal is a permanent separation from the university. Any student who plans to leave the University on a permanent basis must formally withdraw. Any student who has withdrawn from the University and then wishes to return is required to reapply for admission. Suspension, dismissal, or expulsion will override a University Withdrawal.

A withdrawn student cannot petition to return to the University in the same term that the University Withdrawal occurred. Withdrawn students cannot attend classes, will not have access to University services, and must establish an agreed upon timeframe with the Director of Student Housing to vacate University-owned housing. Financial adjustments to tuition, fees, University housing, and student financial aid will be applied.

There are two types of University Withdrawals: Voluntary and Involuntary.

- **Voluntary Withdrawal**: A voluntary withdrawal occurs when the student notifies the University of his or her intent to withdraw by following the University’s Voluntary Withdrawal Policy.
  - If a voluntary withdrawal is requested prior to the end of the Add/Drop period, all classes for the term will be dropped.
  - If a voluntary withdrawal is requested after the Add/Drop period and through the last day of classes for the current term, the student will receive grades of ‘W’ (Withdraw) in all courses enrolled for the term.
  - Students who are withdrawn from their courses during the quarter will be subject to the tuition refund schedule on the academic calendar.

- **Involuntary Withdrawal**: University administrators have the authority to withdraw a student from the University and to revoke that student’s registration at any time for the following reasons:
Failure to comply with academic progress
- Failure to comply with the University tuition and fee policy
- Other reasons deemed appropriate by their Dean or Dean’s designee.

A student is notified in writing that they have been Involuntary Withdrawn. The student may appeal to the Vice President of Student Success and Wellness for a final decision.

Financial Considerations of Leave or Withdrawal

A student granted a leave of absence during an academic term will have their tuition adjusted according to the RFU Tuition Refund Policy. While a student is on leave they will not be charged tuition, are not eligible for federal student loans, and are not covered by medical malpractice insurance. Students approved for a leave of absence are eligible to purchase student medical health insurance for the period of absence.

It is the responsibility of the student who is considering a leave of absence or voluntary withdrawal to contact the Office of Student Financial Services to discuss any possible financial impact before initiating the process.

In accordance with federal regulations, the Office of Financial Aid will recalculate federal aid eligibility for students who withdraw or take a leave of absence prior to completing more than 60 percent of the term.

Students on a leave of absence are not eligible to receive Federal financial aid.

Students on a leave of absence are not considered to be working toward their degree; the grace (deferral) period for loan repayment may lapse during the leave. For loans with the typical six- or nine-month grace period, repayment will start after six or nine months of leave and continue through the rest of the leave. For such students, loan repayment will begin immediately after graduation, rather than six or nine months into the first postgraduate year.

Other Considerations
- Health Insurance and Disability
  - Students participating in the RFU Student Sponsored Health Insurance plan who take a leave of absence may continue coverage in RFU Student Sponsored Health Insurance Plan for four (4) quarters while on a leave of absence. Although in special circumstances, if the leave is extended, the student sponsored health insurance plan may be available. If the leave of absence crosses academic years, insurance coverage may be provided that crosses two separate plan years at the premium rates in effect during those plan periods. Students are responsible for payment according to the published due dates. Non-payment will result in cancellation of health insurance coverage.
  - Students on leave of absence must continue their coverage of the disability insurance policy if applicable to their school/program and will be charged the standard fee for this coverage.
- Students must graduate within their degree maximum timeframes. Exception to the timeframe limitations may be made for students who have not had academic difficulties and
who are enrolled in combined degree programs at the College or School (such as MD/PhD or DPM/PhD).

- Transcripts will not distinguish between voluntary and involuntary leave of absence.
- International students on an issued F-1 or M-1 visa must also have their leave of absence approved by the International Student Advisor.

Definitions

**Voluntary Leave:** A voluntary leave is defined as an active student status representing an approved temporary break from University studies for one or more terms, and with intent to return in a future term. During a leave, students are not enrolled in classes at any point during the academic term of the leave. Degree-seeking students maintain matriculated status.

**Involuntary Leave:** An involuntary leave is defined as a non-punitive, temporary separation of a student from the University imposed by the Associate Vice President of Student Affairs in conjunction with the Dean or Dean’s Designee.

**Voluntary Withdrawal:** Voluntary withdrawal is defined as the student voluntarily submitting notification of their withdrawal from the academic program.

**Involuntary Withdrawal:** An involuntary withdrawal is defined as University administrators using their authority to withdraw a student from the University and to revoke that student’s registration.

**Continuous Enrollment:** Continuous enrollment is defined as registering for at least one credit in all quarters (excluding authorized academic program breaks in enrollment) until the degree is attained or status as a degree-seeking student is terminated.

**Leave of Absence Coordinator:** Students requesting a leave of absence will be assigned a Leave of Absence Coordinator from the University Division of Student Success and Wellness, or another agreed upon official as appropriate, who will support the student through the administrative and logistical issues associated with leave, possible appeal, and return processes.

Procedures

- **Leave of Absence and Withdrawal Procedures**
  - A student experiencing circumstances that require a leave of absence or withdrawal should schedule an appointment with their Dean or Dean’s Designee to review the following academic implications of a leave of absence or withdrawal:
    - Discuss alternatives to a leave of absence/withdrawal
    - Determine the appropriate type of leave of absence/withdrawal. All medical leave of absence requests will be processed by the RFU ADA Coordinator or Leave of Absence Coordinator as assigned and should be reviewed immediately
    - Impact on progress toward degree
• Requirements for degree and enrollment per quarter
• Catalog year and status
• Previous quarters academic standing at the time of the requested leave/withdrawal
• Incomplete grades or other academic issues, if applicable
  o The Student and Dean/Dean’s designee will develop an initial academic plan for re-entry. (This plan will be reviewed upon request for return from leave.)
  o The Student and Dean/Dean’s designee should review the RFU Leave of Absence/Withdrawal Policy and complete the Request for Leave of Absence Form or Withdrawal Form which will be submitted to the Leave of Absence Coordinator.
  o Students with a Rosalind Franklin University issued F-1 or M-1 visa must meet with an International Student Advisor to discuss how immigration regulations will impact the proposed leave of absence. The Advisor (DSO) must sign-off on the leave of absence clearance form.
  o Students will meet with the Leave of Absence Coordinator to review the plan for re-entry. The Leave of Absence Coordinator will also work closely with the Academic Program and with the University administrative offices for clearance, if applicable; these offices include Student Accounts, Financial Aid, Student Health Insurance, and Student Housing, as well as determine the date of withdrawal from classes, date of determination for financial aid purposes, and return date, if applicable.
  o Once all required signatures have been obtained, the Request for Leave of Absence/Withdrawal form will be returned to their Dean or Dean’s designee for review.
  o The Dean or Dean’s designee will notify the student and University Registrar of the approval status. If approved, they provide a written communication to the student outlining the details of the leave, including any conditions for return and academic plan.
  o The University Registrar’s Office will notify the student of an official change of status including the effective date and date of return, if applicable.
  o At the end of the approved leave of absence, a student must petition for return by contacting their Leave of Absence Coordinator and Dean or Dean’s designee via email at least 8 weeks before the start of the quarter in which the student plans to return, or as stated in the LOA approval.

• Request for Extension
  o Leave of absence extensions must be received prior to the end of the initial leave of absence.
  o A student experiencing circumstances that may require extending a leave should schedule an appointment with their Dean or Dean’s designee to review the academic implications of extending the leave.
    • Students should also contact their leave of absence coordinator and the Dean’s designee to discuss plans for re-entry.
  o A student requesting a leave of absence extension or return from a leave of absence at a different time must complete the leave of absence form including the extension portion.
  o Once all required signatures have been obtained, the Request for Leave of Absence form will be returned to the student’s Dean or Dean’s designee for review.
• The student’s Dean or Dean’s designee will notify the student and University Registrar of the approved extension and if approved, will provide a written communication to the student outlining the details of the leave including any conditions for return and academic plan.
• The University Registrar’s Office will notify the student with an official change of status including the effective date and date of return, if applicable.

• **Request to Return Procedures**
  • Students on a leave of absence should contact their Leave of Absence Coordinator and the Dean or Dean’s designee at least 8 weeks prior to the start of the term they are scheduled to return or as stated in their LOA plan approval.
  • A student must complete a Return from Leave of Absence form and be eligible to register for the term in which they want to register (e.g. no financial holds, no academic holds, no disciplinary hold, etc.)
  • A student must schedule a re-entry meeting with the Leave of Absence Coordinator and the Dean or Dean’s designee as appropriate to discuss any outstanding issues associated with the student’s return and obtain all required signatures on the Return from Leave of Absence Form.
  • The student’s Dean or Dean’s designee will notify the student and University Registrar of the approved return.
  • A student should meet with the Office of Student Financial Services to verify that all financial aid requirements for the year or term in which the student is returning are complete.

• **Returning to the University after Withdrawal**: Students who have formally withdrawn from RFU and decide to return to the University must reapply for admission through the Office of Admissions.

**Academic Standards**

**Assessment for Student Learning**
The interprofessional (IP) healthcare education model is mission-driven and an area of distinction at Rosalind Franklin University of Medicine and Science. Interprofessional education is to “learn about, from and with each other to enable effective collaboration and improve health outcomes” (World Health Organization, 2010). Students at RFU learn to treat patients holistically with respect while valuing the contribution that each role brings to the interprofessional healthcare team.

The IP healthcare education model also interfaces well with the Triple Aim of Healthcare (Institute for Healthcare Improvement, 2007), a framework comprised of the following dimensions:

• Improving the patient experience
• Improving the health of populations and
• Reducing the per capita cost of healthcare
At RFU, students in all programs of study will demonstrate the knowledge, behaviors and attitudes found in the four competencies for Interprofessional Collaborative Practice (IPEC, 2016):

- Values and ethics for interprofessional practice
- Roles and responsibilities for collaborative practice
- Interprofessional communication practices
- Interprofessional teamwork and team-based practice

Faculty in the academic programs have mapped the IPEC competencies across the curriculum and utilize a variety of assessment methods for student learning.

For each specific degree and certificate offered, faculty also measure student achievement through assessment at the course and program levels. Examples of course-level assessment may include unit exams, case studies, journals and poster presentations. Program milestone assessment may include shelf exams administered at the completion of the required coursework in the first and second years of a clinical program. Capstone projects, portfolios, clinical evaluations and dissertations are examples of assessment for student learning near the completion of specific graduate degree programs.

**Credit Hour Policy**

RFU uses the Federal definition of a credit hour, which states: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:

- One hour* of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
- At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, clinical/clerkships, internships, thesis papers and dissertations, and other academic work leading to the award of credit hours.

*A class hour at RFU is 50 minutes to allow students and faculty time to transition between classes and buildings.

Definition of the credit hour at RFU is in compliance with the Illinois Board of Higher Education and the Higher Learning Commission.

**Definitions**

**Scheduled hour of classroom instruction at RFU**

- 1 scheduled hour of classroom instruction = 50 minutes of classroom meeting time

**Academic Term - Quarter Calendar at RFU**

- 1 Academic Term generally represents a quarter
• 1 Quarter Credit Hour is defined as 1 Credit Hour Unit over at least 10 weeks
• 1 Semester Credit Hour is defined as 1 Credit Hour Unit over at least 15 weeks

Notes:

• These definitions are consistent with the Carnegie Unit and Student Hour for collegiate instruction in semester and quarter credit hours.
• Courses scheduled over a period of time other than a quarter reflect proportionate instructional hours within the Academic Term

Conversion between Semester and Quarter Credit Hours

• 1 Semester Credit Hour = 1.5 Quarter Credit Hour

Note: This conversion is applied to situations such as transfer of credit from other institutions. When rounding, the resulting figure is adjusted to the nearest 0.5 hour, and that figure is assigned as the credit hour value of that course.

Student Records

Student Records Academic Period

The RFUMS academic calendar follows the quarter system. An academic period refers to the period of time during which students are registered and at the end of that period they are assessed based on their academic performance. Academic periods are determined by the academic rules established in the division.

RFUMS refers to summer quarter, fall quarter, winter quarter and spring quarter as academic periods.

Rosalind Franklin University Family Educational Rights and Privacy Act (FERPA) Policy

Introduction and Purpose: To inform students of their rights and responsibilities pertaining to their university records, in compliance with federal notification requirements. To protect the privacy of student records. To articulate definitions relating to student records, how they may be accessed and disclosed, the complaint procedure and other information relevant to the student record.

Scope and Applicability: University employees (faculty, staff, and student employees) and other covered individuals (e.g., affiliates, vendors, independent contractors, etc.) in their accessing and handling of student records, data, or information in any form (paper, digital text, image, audio, video, microfilm, etc.) during the course of conducting university business (administrative, financial, teaching, research or service). This policy shall apply to all offices and divisions of Rosalind Franklin University (RFUMS) and to all current or former students of RFUMS.
Policy Statement: The following constitutes RFUMS policy concerning student rights of access to personal educational records in compliance with the FERPA. Certain definitions and principles contained in the law and guidelines are as follows:

- A “student” is defined as one who has attended, or is attending, RFUMS and whose records are in the files of the university. Attendance is defined as the date of first enrollment at the university or participation in a university sponsored program or activity, whichever occurs earlier.
- Educational records do not include files retained by individuals that are not accessible to any other person except a designee or replacement.
- Directory (public) Information is limited to name, local and home address and telephone, email address, school or college, class, major field of study, dates of attendance, enrollment status, anticipated graduation date, degrees and awards received, the most recent educational institution attended, and a photograph of a student taken for university purposes.
- Record means any information or data recorded in any medium, including but not limited to handwriting, print, tapes, computer files, microfilm, or microfiche.

Release of Directory Information: Directory information may be released unless the student files the appropriate form in the Office of the Registrar requesting that directory information not be released. Directory information that cannot be restricted includes whether the individual was ever enrolled and degrees awarded.

Release of Grades: Reports of a student’s grades are not routinely mailed. Students may access their grades on Self-Service. The posting of a student’s grades must be done in a manner designed to maintain confidentiality. Grades or evaluations linked to personal identifiers (names, RFU ID numbers, or social security numbers) may not be publicly disclosed without specific permission from the student. Without student permission, grades or evaluations may be posted whether on office doors or on websites, only by using randomly generated codes or numbers.

Record Storage: Students have records in one or more of the following offices:

- Office of the Registrar
- Office of Admissions
- Financial Aid
- Student Accounts
- Division of Student Success and Wellness
- Human Resources (Federal Work Study)

Some departments maintain additional student records separate from the university-wide departments. A list of the academic departments that may have records and their locations can be obtained from the Dean’s Office of the school or college in which the department is located, or from the Office of the Registrar.
Record Access and Exceptions: A student’s record is open to the student, except as listed below. Any reference to student records or to access to student records in this document is subject to these exceptions:

- Confidential letters of recommendation placed in files before January 1, 1975
- Financial records of the student's parents or any information contained therein
- Employment records, except for those cases in which the employment is required as part of the student's program
- Medical and psychological records
- Letters of recommendation or other documents that carry a waiver of the student's right to access
- Records compiled by campus security solely for the purposes of law enforcement.
- Student education records are open to university officials who have a legitimate educational interest in the information contained in the records.

A university official is an employee or other agent of the university. A university official may also be a person or company with whom the university has contracted to carry out a function on the university's behalf.

- The determination of a legitimate educational interest will be made by the person responsible for the maintenance of the record. This determination will be made scrupulously and with respect for the individual whose records are involved. A legitimate educational interest requires that the individual seeking access must have the requested information to perform a job function.

Conditions of Access Waivers for Student References: To ensure the confidentiality of references, certain documents may carry waivers signed by the student relinquishing the right of access to the document. Waivers are subject to the following conditions:

- Waivers can be signed only for the specific purposes of application for admission, candidacy for honor or honorary recognition and candidacy for employment.
- Waivers cannot be required.
- The student shall be told, upon request, the names of those supplying references.
- All items in the academic record not covered by waivers are open to the student. Material not covered by waivers may not be protected by keeping it out of the student’s file.

Third-Party Access: Normally, records can be released, or access given, to third parties (i.e., anyone not a member of the faculty or staff), only with the written consent of the student.

Without the consent of the student, releases to third parties may be given only as follows:

- To federal officers as prescribed by law
- As required by state law
- To research projects on behalf of educational agencies, providing that the agencies guarantee no personal identification of students
- To accrediting agencies carrying out their functions
- In response to a judicial order or lawfully issued subpoena
• By Campus Security to other law enforcement agencies in the investigation of a specific criminal case
• To parents of students who are dependents as defined and verified by IRS standards
• A student’s parent(s) or legal guardian(s) regarding the student’s use or possession of alcohol or a controlled substance if there has been a determination by the university that the student’s use or possession of alcohol or a controlled substance constitutes a violation of a university rule or regulation; and the student is under the age of 21 at the time of disclosure to the parent(s) or legal guardian(s)
• A student’s parent(s) or legal guardian(s) in connection with an emergency
• To appropriate persons if the knowledge of such information is necessary to protect the health or safety of the student or other persons

Continued Record Maintenance: Nothing in this university FERPA policy requires the continued maintenance of any student record. However, if under the terms of this policy a student has requested access to the record, no destruction of the record shall be made before access has been granted to the student.

Records of Deceased Students: FERPA rights cease upon death. However, it is the policy of RFU that no records of deceased students be released after the date of death, unless specifically authorized by the executor of the deceased’s estate, by the next of kin or as stipulated in the Record Access and Exceptions section of this policy.

Record Correction Requests: Students have the right to ask to have records corrected that they believe are inaccurate, misleading or in violation of their privacy rights. The procedures are as follows:

• The student must ask the custodian of the record to amend the record. The student should identify the part of the record that the student wants changed and the reasons.
• Rosalind Franklin University may comply or may decide not to comply. If not, the university will inform the student of the decision and advise the student of the right to a hearing. Requests for a hearing are to be sent to the Vice President for Student Success and Inclusion. Upon request, the university will arrange for a hearing and so notify the student.
• The hearing will be conducted by a hearing officer who is a disinterested party. However, the officer may be an official of the institution. The student may be assisted by one (1) or more individuals.
• The university will prepare a written decision based solely upon the evidence presented at the hearing. The decision will include a summary of the evidence and the reasons for the decision.
• If the university decides that the challenged information is not inaccurate, misleading, or in violation of the student's right to privacy, it will notify the student that he or she has a right to place in the record a statement commenting on the challenged information or setting forth reasons for disagreeing with the decision.
The statement will be maintained as part of the student's record as long as the contested portion is maintained. If the university discloses the contested portion of the record, it must also disclose the statement.

If the university decides that the information is inaccurate, misleading or in violation of the student’s right of privacy, it will amend the record and notify the student in writing that the record has been amended.

Creation, Permanence and Disposal of Student Records: The following is a general guideline regarding the disposal of student records:

- Only such records as are demonstrably and substantially relevant to the educational purposes of the university shall be generated or maintained;
- Permanent retention of student records is limited to those records which are of long-range value to the individual or the university;
- All duplicate copies of permanent records, other than those maintained by the custodian of the permanent records shall be maintained only for the minimum period of time required to serve the basic official function of the individual or department generating or maintaining them. Such records shall be destroyed as soon as they are no longer needed, e.g., within one year following graduation or two years after the last date of attendance. A student will be granted access to their records prior to their destruction when the student has an unsatisfied request outstanding.

Directory Information: In compliance with the federally-enacted regulations and university policies, directory information regarding students attending Rosalind Franklin University of Medicine and Science shall be the:

- Student’s name
- Local address
- Permanent address
- Email Address
- Telephone listings
- Year at the university
- Dates of attendance
- Academic college and major field of study
- Enrollment status
- Participation in officially recognized activities and sports
- Degrees, honors and awards received
- Most recent educational agency or institution attended
- Photographic or electronic pictures or images

Public information pertaining to any individual student may be released by the Registrar upon inquiry unless the student has not agreed to release directory information. Partial or whole lists of students by name and address will not be released for commercial purposes.
Each major administrative unit shall define the kinds of reports and information that may be released to the public.

Information contained in personal files of the student is considered confidential information. With the exception of the information noted above, all student records are considered to be confidential and are open only to university personnel (individuals under contract) who need the information to carry out their official responsibilities (assigned duties and functions).

Although university personnel are authorized access to this information on a “need-to-know” basis (to perform specific duties and functions), they are not permitted to release information to persons outside the university unless authorized in writing by the student, by a court order or according to the exceptions listed in the Record Access and Exceptions section.

Only the official or designated person responsible for the records has the authority to release them. Records may be disclosed to a third party only on condition that the recipient will not permit others to have access to the information without the written consent of the student.

**Rights of Access and Review of Records:** Students have the right to inspect, review, or receive an interpretation of copies of their educational records, except as excluded below. This right may be exercised by completing a written request to access the records. Such requests should be honored as quickly as possible and reasonable, normally within 48 hours; if detailed documentation and/or interpretation are required, the request should be honored within ten days. In all cases, requests for such information must be honored within 45 days.

If a copy(ies) of a portion or all of the records in a student's file is requested, the custodian of the records may charge a fee for copies made, provided the fee does not effectively prevent students from exercising their right to inspect and review (under supervision of a university employee) their records. No fee will be charged to the student to search for or to retrieve records. Each custodian of records is responsible for requiring proper identification of the individual making the request about their records.

**Custodians of Student Records:** The Division of Student Success and Wellness shall be responsible for the proposal, interpretation, enforcement, and publication of general policies and procedures consistent with state and federal laws and guidelines as they relate to the creation, maintenance, use, dissemination, and destruction of records of students who are attending or have attended Rosalind Franklin University of Medicine and Science and shall coordinate the development of general policies and procedures with the appropriate university officials listed below.

**EACH TYPE OF STUDENT RECORD IS THE RESPONSIBILITY OF A DESIGNATED UNIVERSITY OFFICIAL, AND ONLY THAT PROFESSIONAL STAFF MEMBER OR DESIGNATE HAS AUTHORITY TO RELEASE THE RECORDS.**

Please note that some student records listed below are outside the scope of the Division of Student Success and Wellness. The responsible officials are:
• **Academic and Admissions Records (after matriculation)**  
  o Official: Associate Vice President for Student Records, Registrar  
  o Location: Office of the Registrar  

• **Admissions Records (prior to matriculation)**  
  o Official: Associate Vice President for Admissions and Recruitment  
  o Location: Office of Admissions  

• **Alumni Records**  
  o Official: Executive Director of Stakeholder Engagement  
  o Location: Division of Institutional Advancement  

• **Disciplinary Records**  
  o Official: Associate Vice President for Student Affairs  
  o Location: Division of Student Student Success and Wellness  

• **Employment (Work-Study and Student Employment) Records**  
  o Official: Associate Vice President of Human Resources  
  o Location: Human Resources  

• **Student Financial Services (Financial Aid and Student Accounts) Records**  
  o Official: Associate Vice President of Student Financial Services  
  o Location: Office of Student Financial Services  

• **International Student Records**  
  o Official: Executive Director of Diversity and Inclusion/Designated School Official  
  o Location: Division of Diversity, Equity and Inclusion  

• **Security Records**  
  o Official: Director of Campus Safety  
  o Location: Department of Campus Safety  

• **Veterans Records**  
  o Official: Coordinator of Veterans Affairs  
  o Location: Office of the Registrar  

• **Student Activities Records**  
  o Official: Director of Student Life  
  o Location: Office of Student Life  

• **Criminal Background Checks**  
  o Official: Vice President, Student Success and Wellness  
  o Location: Division of Student Success and Wellness  

**Special Considerations for Faculty for Protecting Student Information in the Online Course Environment**  
A FERPA policy for online and blended courses typically includes areas of focus and details regarding the protection of student information and also the information that is shared between an instructor and student as part of the online course.  

• Faculty teaching online courses for the university will use the institutional LMS (Learning Management System, in our case D2L/Brightspace) for delivery of the course to ensure the security of student work and grades.
- Faculty teaching online courses for the university will use the university's secure online system for electronically submitting grades to the Registrar.
- All emails between the instructor and students in an online course need to occur through the LMS or via the university email system so that communications between the instructor and student, e.g., grades, feedback on student work, etc., remain confidential and protected by the university.
- LMS account information must be kept secure by faculty and students enrolled in online courses. Students in a course cannot access other students' work or grades. Faculty and students cannot share their personal LMS login information with anyone or give access to the course in the LMS to others who are not officially enrolled in the course. Exceptions are allowed for other university faculty and administration to access a course when the appropriate justification is provided and approved.
- Faculty teaching in the online environment will follow all university FERPA guidelines for sharing educational record information with other university faculty and staff and others outside the university.
- During the online course and once it is archived, all student information is protected including course data and participation.

**Complaint Procedure:** If a student believes that the university is not in compliance with the RFUMS Student Record Policy and/or the Family Educational Rights and Privacy Act (FERPA), he/she should check first with the office involved and/or the Vice President for Student Success and Wellness.

If a student wishes to file a complaint with the federal government concerning the university's failure to comply with FERPA, he/she must submit the complaint, in writing, to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, D.C. 20202-5920, (http://www.ed.gov/policy/gen/guid/fpco/ferpa/students.html). The Family Policy Compliance Office will notify the student and the university when the complaint has been received. They will investigate the complaint, and may require further information. Following its investigation, they will provide written notification of its findings and basis for such findings. In the event the university is found not to be in compliance, it will be afforded the necessary time to comply. If it does not then comply, additional action may be taken by the Family Policy Compliance Office. For guidelines concerning this complaint procedure, see 34 CFR Paragraph 99.64 and the subsequent regulations of the Family Educational Rights and Privacy Act.

**FERPA Violations:** Faculty, staff and/or student employees who violate this university policy may be subject to disciplinary action for misconduct and/or performance based on the administrative process appropriate to their employment.

Students who violate this university policy may be subject to proceedings for non-academic misconduct based upon their student status.

Faculty, staff, student employees and/or students may also be subject to the discontinuance of specified information technology services based on the policy violation.
Student Records (General)

Academic Records and Transcripts: The permanent academic record for each student is maintained by the Office of the Registrar. While the grades may be reported unofficially to the student, dean, and advisor, the only true and valid documentation of academic work and student status is an official transcript of the academic record. The transcript is available only with the signed authorization of the student.

The academic transcript is part of a student’s academic record. In addition to the transcript, the Office of the Registrar collects other documents essential to completing the academic history of the student. These records and the transcript, together, constitute the student’s permanent academic records.

The permanent academic record is the unabridged history of a student’s academic progress at RFUMS and cannot be altered except in conformance with policies governing adding, dropping, modifying courses, recording academic achievements, and evaluation.

Other university offices such as the student’s department may collect other education records, not necessary to be included in the permanent academic record.

Record Retention: The Division of Student Success and Wellness at RFUMS maintains various records concerning students. In order to preserve students’ rights to privacy as well as conform with federal law, the university has established certain procedures to govern the handling of student records.

Retaining records serves two purposes. In the short term, it provides those responsible for management of student development with the means to monitor progress and resolve problems. In the long term, a clear records retention policy enables the university to comply with federal, state, private, and local regulations governing auditability.

Federal regulations, as they relate to student records, are governed by the Family Educational Rights and Privacy Act of 1974 (FERPA). Please review the FERPA policy for more details.

Name Changes: A student may request a name change by completing the necessary request with the Office of the Registrar. Documentation of a student’s name change is required. A student must present the original documentation in person, or mail a certified copy of the documentation. A student must provide a certified copy of marriage license, court-issued name change, or divorce decree. A student must also provide a social security card indicating the new name. The
Name Change Form can be found on the Registrar’s InSite page under the Student Requests menu.

**National Student Clearinghouse (NSC):** The National Student Clearinghouse (NSC) is a central repository of student enrollment information. Its purpose is to provide required enrollment information to the servicers and guarantors of the Federal Student Loan Programs.

There are several advantages to allow the National Student Clearinghouse (NSC) to provide the enrollment information for servicing student loans:

- It allows students who transfer from one participating school to another to continue their in-school deferment status without inherent delays.
- The servicers can contact one central location to obtain information for all of the students whose loans they service.
- Deferments can be granted much more quickly because the data is shared with the servicers electronically.
- There is less chance of human error because the reporting process is standardized and enrollment updates occur frequently.

RFUMS provides enrollment information to the NSC on a monthly basis. The purpose of these frequent certifications is to be able to reflect changes in enrollment status. The NSC loads the data onto their database and sends electronic enrollment reports to the servicers who are members of the NSC and mail paper reports to non-members upon request.

**Transferring Admissions Records to the Registrar’s Office:** A complete admission file should be kept for each applicant until the end of an application process. When a student is admitted into the university, the admissions file is subject to standard retention policies. However, when an admitted student does enroll, certain files must be transferred to the Registrar’s Office in accordance with the following process.

**Transfer of Admissions File to the Registrar’s Office Process:** The following documents from the student’s application should be transferred to the Office of the Registrar to become part of the student’s educational record:
- Application for admission
- Supplemental application (if applicable)

All other application materials may be maintained for seven years in remote storage. Examples of these “other” application materials include:
- Letters of evaluation
- Screener sheets
- Interview forms
- Proof of supplemental application fee

Copy of the Letter of Acceptance can be sent to:
- Registrar’s Office
- Financial Aid Office
Graduation Requirements
Students will be recommended for graduation by the college/school faculty upon successful completion of all degree requirements, review of academic performance and demonstration of professional standards. All candidates for certificates and degrees are recommended to the Board of Trustees for approval. All financial obligations, fees and fines to the university must be settled. For specific degree requirements view the graduation requirements section for that specific program.

University-Wide Academic Opportunities

Baldwin Institute for Interprofessional Education
The DeWitt C. Baldwin Institute for Interprofessional Education was established at Rosalind Franklin University of Medicine and Science to support and further develop the university’s dedication to interprofessional, team-based, patient-centered care. The role of the institute is to serve as a hub of learning, practice and research in interprofessionalism (IP), coordinating and continually improving this crucial element of the university’s mission and vision. Institute team members support faculty as they incorporate interprofessional competencies and activities into a variety of learning opportunities for students such as the following:

- Specialized IP courses such as the Foundations for Interprofessional Practice course required for all first-year students enrolled in clinical degree programs.
- Required program and elective courses offered using an IP education approach.
- Interprofessional simulations and IP student-led Grand Rounds.
- Service Learning opportunities for students that focus on practicing team-based care while serving communities in need.
- Opportunities to work in the Interprofessional Community Clinic (ICC) that is run by RFU students representing a variety of health profession programs.
- Courses in the PhD and DSc degree programs in Interprofessional Healthcare Studies.

The Institute also collaborates with the university’s colleges and schools to offer faculty development programs, webinars and symposia about IP education and clinical practice. Institute personnel work with university faculty to conduct specialized research to improve health outcomes and advance the field of IP education and practice. Periodically, opportunities also emerge to collaborate and present best practices in interprofessionalism at regional, national and international conferences. The DeWitt C. Baldwin Institute for Interprofessional Education is located on the first floor of the Health Sciences Building.

Distinction for Excellence in Interprofessional Healthcare
The Department of Interprofessional Healthcare Studies and the DeWitt C. Baldwin Institute for Interprofessional Education have established a special academic track, Distinction for Excellence in Interprofessional Healthcare, to recognize RFUMS students who have distinguished themselves through their commitment to interprofessionalism. The goal of the program is to develop and recognize graduates with the knowledge, skills, and attitudes to lead and practice
collaboratively in interprofessional teams. The program is founded on the Interprofessional Education Collaborative competencies (Interprofessional Communication, Teams and Teamworking, Values and Ethics for IP Practice, and Roles and Responsibilities for IP teams) and recognizes exceptional student work in the areas of IP Leadership, IP Clinical Care, IP Scholarship, IP Service, IP Continuing Education, and Health Promotion and Wellness.

Interested students should review the specific requirements necessary to apply for the program at the Department of Interprofessional Healthcare Studies (College of Health Professions) website. These requirements include successful completion of Foundations of Interprofessional Practice, identification of a faculty mentor, construction of a plan of IP study under that mentor’s supervision, and proof of good academic standing within their university program of study. Qualified students may then apply. There are a limited number of students per year that can be accepted into the program. Acceptance into the program shall be based on meeting the necessary requirements, quality of the plan of IP study, and availability of faculty mentorship. Completion of the program results in specific recognition on the student’s academic transcript.

**Global Health at RFU**

The Office of Global Health Initiatives coordinates opportunities for students to serve communities in low- and middle-income countries while learning to identify and remedy health disparities. Global Health at RFU educates students about meeting the health needs of the poor in underserved communities with compassion, integrity, high ethical standards and a high level of competence. The university believes the benefits of learning in and about other parts of the world are invaluable. RFU also believes that honing students’ cross-cultural communication and problem-solving skills will help to improve healthcare delivery and patient outcomes in the United States.

RFU is especially well-suited to advance the field of Global Health because of our interprofessional approach to learning and service. In addition to partnership sites in China, St. Lucia and Uganda, collaboration with Child Family Health International (CFHI) offers students a variety of global health learning experiences at 31 sites in 10 countries. During the past three academic years, more than 250 RFU students have participated in Global Health opportunities in 28 different countries.

**Interprofessional Community Clinic**

The Interprofessional Community Clinic (ICC) is a unique and impactful clinical opportunity for RFU students, and influences local communities to ensure a healthier population. Founded in 2013 by students from the Chicago Medical School, the ICC now has students from the several degree programs working together in interprofessional teams to provide accessible, quality healthcare to non-insured residents of surrounding communities.

The clinic is currently open Thursday evenings from 4-8 p.m. in the RFU Health Clinics adjacent to the university campus in North Chicago. The clinic’s evening hours allow patients to see several different healthcare providers in one visit, which benefits individuals lacking paid time-off from work, transportation or child care during the day.
For students, the Interprofessional Community Clinic serves as a welcome complement to their long hours of study. It also helps students relate to their ultimate goal of being a healthcare provider during the didactic years of their program of study. Students can volunteer at the clinic, join the student organization that facilitates the operation of the clinic or do both. For more information about the ICC’s unique model of service, clinical practice and student initiative, contact the Interprofessional Clinical Initiative (ICI), the student organization responsible for running the Interprofessional Community Clinic at ici@rosalindfranklin.edu.

**Service Learning**

Service learning at RFU is a year-round, mission-driven effort to provide students with opportunities to serve the community they live in and gain knowledge that goes beyond the traditional classroom. Through meaningful service-learning projects, students will not only address issues affecting the health and well-being of North Chicago and Lake County residents, but they will also be exposed to the social, cultural and diverse context of our local community and their health needs. Their service learning experience will help them gain insight into the reality of health disparities and the social determinants of health that disproportionately affect urban populations and the underserved.

Service learning provides an opportunity for our students to practice what they learn in the classroom and bring a meaningful benefit to the communities they serve. Through interprofessional teamwork, students will improve their knowledge and ability for civic engagement, cultural humility and social responsibility.

For assistance and questions, please contact:
Shelly Brzycki
Associate Vice President for Student Affairs
Division of Student Student Success and Wellness
847-578-8355
shelly.brzycki@rosalindfranklin.edu
Chicago Medical School (CMS)

Mission
To educate a diverse student body in a community-engaged, interprofessional environment. Our graduates become exemplary, compassionate physicians and scientists dedicated to improving the health and wellness of their patients and communities through clinical excellence, scientific discovery, service and leadership.

Vision
To be an exemplary community-engaged medical school, recognized for inclusive excellence, innovation in medical education, scientific discovery, interprofessionalism, service and leadership.

Programs of Study
Doctor of Medicine (MD)
Doctor of Medicine/Doctor of Philosophy (MD/PhD)

Doctor of Medicine (MD)

Program Accreditation
The medical education program leading to the MD degree at the Chicago Medical School at Rosalind Franklin University of Medicine and Science is fully accredited by the Liaison Committee on Medical Education (LCME).

The LCME is recognized by the U.S. Department of Education as the accrediting authority for medical education programs within the United States leading to the MD degree. Students and graduates of medical education programs accredited by the LCME are eligible to take the United States Medical Licensing Examination (USMLE). Graduates from institutions whose programs are accredited by the LCME have unrestricted eligibility to enter graduate medical education programs accredited by the Accreditation Council on Graduate Medical Education (ACGME).

Program Introduction
Chicago Medical School offers a four-year program where students learn the essential knowledge, skills and attitudes of a physician, including excellent communication skills, technical expertise and the ability to reason and solve problems. In addition, the medical curriculum moves beyond these fundamentals by offering innovative teaching methods, an emphasis on professional growth and development, a supportive atmosphere with individual guidance and mentoring, opportunities to participate in bench or clinical research and interprofessional learning in the classroom and clinical setting. Students learn from an incredibly diverse array of patients at a wide variety of clinical sites in and around Chicago, as well as at the
Billings Clinic in Billings, Montana. CMS graduates are well prepared to adapt and thrive in the healthcare arena today and into the future, and to pursue residency training in any specialty.

**Admission Requirements**
In addition to the university’s minimum requirements, applicants must meet the following program requirements.

**MD Application Procedure**
- American Medical College Application Service (AMCAS): Applicants for admission to the first-year class must be initiated through AMCAS. Applications must be submitted online through the AMCAS website.
- Supplemental Application: Upon receipt of the AMCAS application, Chicago Medical School will forward additional materials and instructions to you to complete the application. Candidates must submit a $125 application fee when submitting the supplemental application materials. Applicants receiving an AMCAS fee waiver automatically receive a waiver of the CMS application fee. All application materials, including the supplemental fee, must be received by the deadline.

**MD Admission Requirements**
**Prior Degree:** Chicago Medical School requires at least 90 credit hours of undergraduate academic work at a regionally accredited college or university prior to applying. A bachelor’s degree is required prior to matriculation with the exception of DePaul Pathways program and Lake Forest College Health Professions Program applicants.

**Prerequisite Courses:** Listed below are the baccalaureate degree-level science courses currently required for admission to the Medical School. In addition, applicants are urged to seek a broad-based education that includes the humanities and social sciences.

- One-year Introductory Biology with accompanying laboratory (or equivalent).
- Two-year Chemistry sequence that includes all three of these chemistry disciplines:
  - General/Inorganic Chemistry with accompanying laboratory
  - Organic Chemistry with accompanying laboratory;
  - Biochemistry (accompanying laboratory recommended but not required).
- One year of Physics with accompanying laboratory.
- Two courses in Behavioral/Social Sciences - First-year Psychology and Sociology courses strongly suggested

**AP Credit Policy:** AP Science or Social Science courses for which you received course credit at your undergraduate degree-awarding institution will be considered as fulfilling the pre-medical course requirements. However, the admissions committee will expect advanced-level undergraduate courses in most of the science or social science disciplines for which the AP credit was awarded (except Physics).
Recommended Prerequisite Courses:

- One course in Statistics
- One course in Advanced Biology (200 level or above) - Molecular and Cell Biology, Physiology, Genetics, Microbiology, Neurobiology
- English Composition
- Other coursework in the Humanities and Social Sciences (e.g., Philosophy/Ethics). *

*Applicants are encouraged to gain research laboratory experience either through research or a laboratory research course.

Grade-Point Average (GPA): Undergraduate academic performance, especially in the sciences, is important but is only one of the many factors evaluated when considering an application.

Tests: The Medical College Admissions Test (MCAT) exam is required. For the 2023-2024 admissions cycle, only scores from January 2021 or newer will be considered. If multiple exams are taken, the most recent score is considered for admission.

Letters of Recommendation: There are three options for submitting letters of recommendation:

1. Three individual letters of recommendation
2. One committee letter
3. One letter-packet (containing no more than three individual letters)

If a candidate chooses to submit three individual letters, the CMS admissions committee prefers, (but does not require), at least one recommendation from a medical professional, (not necessarily an MD), with whom the candidate has worked. No more than three individual letters, one committee letter, or one letter packet containing a maximum of three individual letters will be considered by the CMS Admissions Committee. All letters must be included in the candidate’s AMCAS application.

Motivation for a Career in Medicine: The CMS admissions committee looks for students who understand healthcare teams and the role of a physician on the team. This is typically demonstrated through prior employment and volunteer work.

Personal Statement: Applicants will submit a statement of purpose within the AMCAS application.

Service and Leadership: We value students who are dedicated to serving others and have demonstrated leadership potential through academic, research, or other pursuits.

Communication Skills: We look for students who demonstrate a caring attitude and strong interpersonal communication skills.

Non-Degree Applicant Policy: CMS does not accept non-degree seeking students.

Supplemental Application: Applicants are sent the supplemental application upon completion of the AMCAS application with optional essays for applicants to describe the diversity they bring to the program and/or the challenges they encountered on their journey to medical school.
Situational Judgment Test (SJT): All applicants must complete the required Situational Judgment Test (SJT) assessment to assist with our selection process. Successful completion of the SJT is mandatory in order to maintain admission eligibility. The SJT is an online test which assesses non-cognitive skills and interpersonal characteristics and complements the other tools that are used for applicant screening. Implementing the SJT further enhances fairness and objectivity in the selection process.

Transfer Applicant Policy

CMS considers transfer student applications exclusively for entry into the first clinical year based on availability restrictions and only for students deemed to be in a rare and/or extraordinary circumstance. Approval of a transfer application depends on many factors and is solely at the discretion of CMS.

Transfer applicant admissions requirements include:

- Having a compelling reason to transfer, i.e., students from a medical school that has closed suddenly, students with extenuating family circumstances, including being the spouse or domestic partner of a CMS medical or RFU graduate student, house staff or faculty
- Transferring from an LCME accredited school; have written approval from the dean of the applicant’s current school
- Being on track to successfully complete all preclinical coursework at the transferring institution
- Having registered for Step 1 of the USMLE licensing exam or successfully completed the exam
- Having completed all preclinical academic requirements specified in the CMS Student Evaluation Promotions and Awards Committee Handbook before the start of studies
- Meeting all other admissions requirements as stated in the RFU catalog for the year of the application

Technical Standards

To assure that candidates for admission, promotion, and graduation are able to complete the entire course of study and participate fully in all aspects of medical training, essential abilities and characteristics are required. These include certain minimum physical and cognitive abilities and sufficient mental and emotional stability. Any intention of the student to practice only a narrow part of the curriculum upon graduation does not alter the requirement that all students perform satisfactorily in the full curriculum and meet all graduation requirements. For purposes of this document and unless otherwise defined, the term "candidates" means candidates for admission to medical school as well as Chicago Medical School students who are candidates for retention, promotion or graduation.

Chicago Medical School has a societal responsibility to train competent healthcare providers who demonstrate critical judgment, extensive knowledge and well-honed technical skills. The essential skills, abilities and characteristics described herein are also referred to as technical
standards. They are described below in several broad categories including: observation; communication; motor function; intellectual-conceptual, integrative, and quantitative abilities; and social and behavioral skills. These standards must be met throughout medical school in order for students to make satisfactory progress and graduate. Candidates and current students who have questions regarding the technical standards or who believe they may need to request reasonable accommodation(s) in order to meet the standards are encouraged to contact Services for Students with Disabilities.

**Observation**
Candidates must be able to acquire a defined level of required information as presented through demonstrations and experiences in the basic sciences, including but not limited to such things as dissection of cadavers; examination of specimens in anatomy, pathology, and neuroanatomy laboratories; and microscopic study of microorganisms and tissues in normal and pathologic states. Candidates must be able to accurately acquire information from patients and assess findings. They must be able to perform a complete physical examination in order to integrate findings based on this information and to develop an appropriate diagnostic and treatment plan. These skills require the use of vision, hearing, and touch or the functional equivalent.

**Communication**
Candidates must be able to communicate effectively, efficiently, and sensitively with patients, families, other healthcare providers, faculty, staff, and peers. They must be able to obtain a medical history; describe changes in mood, activity, posture and behavior; interpret non-verbal aspects of communication, document and transmit information accurately and clearly, and establish therapeutic relationships with patients.

**Motor**
Candidates must be able, with appropriate training, to perform a complete physical exam and basic clinical procedures. The candidates must be able to respond promptly to general and emergency clinical situations. These skills require a degree of physical mobility and neuromuscular coordination.

**Intellectual-Conceptual (Integrative and Quantitative) Abilities**
Candidates must be able to learn through a variety of modalities including, but not limited to, classroom instruction; small group, team and collaborative activities; individual study; preparation and presentation of reports; simulations and use of computer technology. The candidates must be able to measure, calculate, reason, analyze, integrate and synthesize. In addition, they must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. They must also be able to formulate and test hypotheses that enable effective and timely problem-solving in diagnosis and treatment of patients in a variety of clinical settings and health care systems.

**Behavioral and Social Attributes**
Candidates must possess the emotional health required for full utilization of intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive, and effective
relationships with patients. They must display characteristics of integrity, honesty, attendance and conscientiousness, empathy, a sense of altruism, and a spirit of cooperation and teamwork. The candidates for the MD degree must accept responsibility for learning and must exercise good judgment. They must be able to contribute to collaborative, constructive learning environments; accept constructive feedback from others; and take personal responsibility for making appropriate positive changes. The candidates must have the physical and emotional stamina and resilience to be able to tolerate physically taxing workloads and to function in a competent and professional manner under highly stressful situations. Candidates must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of patients.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

Transfer credits and advanced standing will be determined on a case-by-case basis.

The Chicago Medical School offers an advanced standing admissions pathway for first-year residents of the Oral and Maxillofacial Surgery Residency Program offered by Cook County Health, allowing for a Doctor of Medicine degree from RFUMS. Final decisions on admission depend on many factors and are at the sole discretion of the Student Admissions Committee of the Chicago Medical School at RFUMS, consistent with Chicago Medical School and RFUMS policies.

In general, the pathway will require one year at OMFS followed by two clinical years at RFUMS. RFUMS will grant a Doctor of Medicine degree to students who successfully completed the first post-graduate year (PGY1) at OMFS and the M3 and M4 clinical years at RFUMS. In addition, students will have successfully completed the residency requirements specified in the OMFS catalog at the time of admission to OMFS and the Doctor of Medicine requirements as specified in the RFUMS catalog at the time of matriculation to RFUMS; however, they will not be required to complete any residency requirements while enrolled at the Chicago Medical School.

The Student Admissions Committee of the Chicago Medical School at RFUMS will deem applicants who have been conferred a DDS/DMD degree from a program accredited by the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA) or equivalent to have an education equivalent to the M1 and M2 basic science years at RFUMS on a case-basis.

**Core Competencies**

Upon completion of the program, the student will be able to demonstrate the following outcomes or competencies:
• **Patient Care:** Provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
  o 1.1 Perform all medical, diagnostic, and surgical procedures considered essential for the area of practice.
  o 1.2 Gather essential and accurate information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging, and other tests.
  o 1.3 Organize and prioritize responsibilities to provide care that is safe, effective, and efficient.
  o 1.4 Interpret laboratory data, imaging studies, and other tests required for the area of practice.
  o 1.5 Develop and carry out patient management plans.
  o 1.6 Provide appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings and following up on patient progress and outcomes.

• **Knowledge for Practice:** Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.
  o 2.1 Apply established and emerging bio-physical scientific principles fundamental to health care for patients and populations.
  o 2.2 Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision-making, clinical problem-solving, and other aspects of evidence-based health care.
  o 2.3 Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, disease prevention and health maintenance and promotion efforts for individual patients and/or populations of patients to improve care.
  o 2.4 Apply principles of social-behavioral sciences to provision of patient care, including assessment of the impact of psychosocial and cultural influences on health, disease, care-seeking, care compliance, and barriers to and attitudes toward care.

• **Practice-Based Learning and Improvement:** Demonstrate the ability to investigate and evaluate one’s care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.
  o 3.1 Identify strengths, deficiencies, and/or gaps in one’s knowledge, skill and/or attitudes, set learning goals, and perform appropriate help seeking behaviors and learning activities to improve performance.
  o 3.2 Systematically analyze practice using quality improvement methods.
  o 3.3 Incorporate feedback into daily practice.
  o 3.4 Demonstrate an investigative and analytical approach to clinical decision making by using technology to find current studies, new evidence, guidelines,
technologies, and products related to patient health problems to improve outcomes.

- 3.5 Participate in the counseling and education of patients, families, students, trainees, peers and other health care professionals to enable shared decision making.
- 3.6 Continually identify and analyze new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes.

**Interpersonal and Communication Skills: Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.**

- 4.1 Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.
- 4.2 Communicate effectively with colleagues within one's profession or specialty, other health professionals, and health related agencies.
- 4.3 Acquire an understanding of a consultative role to other health professionals.
- 4.4 Maintain comprehensive, timely, and legible medical records.
- 4.5 Demonstrate sensitivity, honesty, and compassion in difficult conversations, including those about death, end of life, adverse events, bad news, disclosure of errors, and other sensitive topics.
- 4.6 Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions.

**Professionalism: Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.**

- 5.1 Demonstrate compassion, integrity, respect for patients, and a commitment to ethical principles including but not limited to autonomy, confidentiality, informed consent, and the provision of appropriate patient care.
- 5.2 Demonstrate responsiveness to patient needs that supersedes self-interest.
- 5.3 Demonstrate accountability to patients and the profession.
- 5.4 Reflect on one's own values, culture, and beliefs and demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

**Systems-Based Practice: Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.**

- 6.1 Work effectively in various health care delivery settings and systems.
- 6.2 Coordinate patient care within the health care system relevant to one's role.
- 6.3 Incorporate considerations of high-value care in patient and/or population-based care.
- 6.4 Advocate for quality patient care and optimal patient care systems.
- 6.5 Participate in identifying system errors and implementing potential systems solutions.
• **Interprofessional Collaboration: Demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care.**
  
  o 7.1 Work with other health professionals as a member or leader of a health care team to establish and maintain a climate of mutual respect, shared values, dignity, diversity, ethical integrity, and trust.
  
  o 7.2 Use the knowledge of one’s own role and the roles of other health professionals to appropriately assess and address the health care needs and advance the health of the patients and populations served.
  
  o 7.3 Communicate with patients, families, communities and other health professionals in a responsive and responsible manner that supports a team approach to the maintenance of health and the treatment of disease in individual patients and populations.
  
  o 7.4 Participate in different team roles to establish, develop, and continuously enhance principles of team dynamics within interprofessional teams to plan, deliver and evaluate patient- and population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.

• **Personal and Professional Development: Demonstrate the qualities required to sustain lifelong personal and professional growth.**
  
  o 8.1 Demonstrate healthy coping mechanisms, management of conflict and capacity to manage change between professional and personal responsibilities.
  
  o 8.2 Provide leadership skills that enhance team functioning; the learning environment, and/or the health care delivery system.

### Program Degree Plan

**Phase I**

**Year 1 (75.5QH)**

- MCBA 500 Clinical Anatomy (8.5QH)
- MCMS 500 Clinical Foundations of Medicine (6QH)
- MCMS 505 Infection, Immunology, & Hematology (9.5QH)
- MCMS 510 Scientific Foundations of Medicine (10.5QH)
- MCMS 515 Gastroenterology (8QH)
- MCMS 520 Skin (3.5QH)
- MCMS 525 Cardiovascular, Pulmonary, & Renal (15QH)
- MCUR 502 Essentials of Clinical Reasoning I (7.5QH)
- MEDX 529 Foundations for Interprofessional Practice (2QH)
- MMTD 509 Clinical Epidemiology (1.5QH)
- MMTD 510 Bioethics (2QH)
- MOSA 510 Principles of Professionalism, Health Care, and Health Equity I (1.5QH)

**Year 2 (56.5QH)**

- MCMS 600 Musculoskeletal (4QH)
- MCMS 605 Neurobehavioral Health (19.5QH)

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MCMS 610 Endocrine & Reproductive (13QH)
MCMS 615 Multisystem (6.5QH)
MCUR 602 Essentials of Clinical Reasoning II (5.5QH)
MCCR 606 Clinical Skills (2QH)
MMTD 601 Patient Safety (2QH)
MOSA 610 Principles of Professionalism, Health Care, and Health Equity II (1QH)
Electives (3QH)

Phase II

Year 3 (73QH)
MFPM 701 Family Medicine/Primary Care Clerkship (9QH)
MMED 700 Internal Medicine Clerkship (12QH)
MNEU 700 Neurology Clerkship (6QH)
MOBG 700 Obstetrics/Gynecology Clerkship (9QH)
MOSA 710 Principles of Professionalism, Health Care, and Health Equity III (1QH)
MPED 700 Pediatrics Clerkship (9QH)
MPSY 700 Psychiatry Clerkship (9QH)
MSUR 700 Surgery Clerkship (12QH)
Electives (6QH)

Phase III

Year 4 (54.5QH)
MCCR 898 Transition to Internship (1QH)
MOSA 810 Principles of Professionalism, Health Care, and Health Equity IV (1QH)

Take one of the following Sub-Internships (6QH):
MEMG 800 Emergency Medicine Sub-Internship
MFPM 805 Family Medicine Sub-Internship
MMED 800 Internal Medicine Sub-Internship
MNEU 800 Neurology Sub-Internship
MPED 805 Pediatrics Sub-Internship
MPSY 800 Psychiatry Sub-Internship
MSUR 801 Surgery Sub-Internship

31 weeks Electives (46.5QH):
   12 weeks minimum intramural CMS electives
   23 weeks minimum clinical electives
   12 weeks maximum in any single specialty (except medicine or pediatrics)
Assessment for Student Learning

Grading System

Grades are awarded for all courses leading to the MD degree. Final grade designations will be assigned using defined grading systems by year and curricular classification. Assessment of student learning may include, but are not limited to, traditional multiple-choice examinations, written assignments, projects, presentations, demonstration of required skills, and direct observation.

In the clinical setting, students are evaluated based on a detailed grading rubric which includes descriptions of skills, attitudes, and behaviors observed in the clinical setting. Students must also pass the appropriate final subject exam. A passing grade for the final subject exam is determined based on student performance in comparison to nationally published performance standards.

Grading Systems by year and curricular classification:

- Phase I (M1 year, M2 year) Courses: pass or fail (P/F)
- Phase II (M3 year) Required Clerkships: pass, high pass, honors (P/HP/H)
- Phase III (M4 year) Sub-Internships: pass, high pass, honors (P/HP/H)
- Electives: pass, high pass, honors (P/HP/H) or pass/fail or pass/fail/honors or A, B, C, F
- If a student receives an Incomplete (I) or Needs Remediation (NR), necessary coursework must be completed or remediated by the deadline indicated by the instructor. If coursework is not satisfactorily completed by the deadline or within one calendar year, the grade will be changed to Fail (F).

Basic Science Tally

Although CMS students receive Pass/Fail grades on their transcript during their first two years, their Basic Science courses are provided to the Registrar's Office as raw numeric scores, rounded to two decimal places. Scores 69.50% and above are rendered as Pass and below are rendered as Fail.

Although not displayed on the transcript, a Basic Science Tally is calculated after completion of each student’s second year, based on these raw numeric scores, that is used for a variety of purposes, such as the assignment of certain distinctions (e.g., Distinction in Basic Sciences).

The Tally is calculated as follows. The raw numeric score for each of the following Basic Science courses is multiplied by the credit hours for that course, and then these weighted amounts are added together and divided by the total number of credit hours for all of the courses. This tally is rounded to two decimal places. The following required courses are used to create the tally: MCBA 500, MCMS 505, MCMS 510, MCMS 515, MCMS 520, MCMS 525, MCUR 502, MMTD 509, MMTD 510, MCMS 600, MCMS 605, MCMS 610, MCMS 615, MCUR 602, MMTD 601.

If a student is off-track from their original cohort, the numeric scores will be filled in from whatever year in which they took the course, and weighted according to the credit hour value as it was when they took it. If certain courses did not exist or were not part of the curriculum at the time, or if certain courses were not taken for approved reasons at the time of the calculation, the
CMS Associate Dean for Basic Sciences will make a determination on a case-by-case basis regarding which courses, if any, should be used instead in the Tally calculation as equivalent, or which might be excluded from the calculation entirely.

If a course is a failure at the time the Tally is calculated, it will count in the tally as whatever numeric score was assigned. If a course was failed and then re-taken, the course will count as a 69.50% in the tally, regardless of how high a numeric score the student might have achieved during the re-take. And the score after re-taking the exam as remediation (as opposed to a make-up for an excused absence) will only ever be entered as 69.50%. The maximum score possible is 100.00%.

**Clerkship Tally**

Although CMS students receive Honors/High Pass/Pass/Fail grades on their transcript for required clerkships, their clerkship courses are weighted and used to calculate a “Clerkship Tally” that is calculated after completion of their Third Year, and used for a variety of purposes (eg., for assigning the Summary Designator in the MSPE).

The Clerkship Tally is calculated as follows. Honors grades are assigned a value of 95.00%, High Pass grades are assigned a value of 85.00%, and Pass grades are assigned a value of 75.00%. This value is multiplied by the credit hours for that course, and then these weighted amounts are added together and divided by the total number of credit hours for all the courses. This Tally is rounded to two decimal places. The following required clerkships are included in the Clerkship Tally: MPFM 701, MMED 700, MNEU 700, MOBG 700, MPED 700, MPSY 700, MSUR 700.

If a student is off-track from their original cohort, the grade will be filled in from whatever year in which they took the course, and weighted according to the credit hour value as it was when they took it. If certain courses did not exist or were not part of the curriculum at the time, the CMS Assistant Dean of Clinical Education will make a determination on a case-by-case basis regarding which courses, if any, should be used instead in the Tally calculation as equivalent, or which might be excluded from the calculation entirely.

If a course was failed and then re-taken, the course will count as a P (75.00%) in the tally, even if an HP or H was achieved during the re-take.

**Third-Year Tally**

A Third-Year Tally is calculated after the completion of each student’s third year by combining the student’s Basic Science Tally with their Clerkship Tally. Each are weighted 50%, meaning the Basic Science Tally is added to the Clerkship Tally and that total is divided by two. This calculation may be used for a variety of purposes, such as the assignment of certain distinctions (eg., nomination for Alpha Omega Alpha Honor Medical Society).

**Fourth-Year**

As the fourth-year curriculum is mostly made up of a wide variety of differing electives that are highly individualized from student to student, no GPA, tally, ranking, or equivalent is calculated from fourth-year grades.
Assessment Methods

Students are assessed through:

- Course and Clerkship Performance
- Formative and Summative Examination
- Written Assignments, Projects, and Presentations
- Multi-Source Assessment of Skills and Behaviors
- National Normed Exam Performance
- Portfolio Assessment
- Comprehensive Examination and Longitudinal Performance
- Lab Exam Performance
- Direct Observation in Clinical Setting

Graduation Requirements

Requirements for the MD Degree

To be awarded the MD degree from CMS, a student must accomplish the following:

- Total program-specific quarter hours for degree: 259.5
- Successful completion of all required courses and an approved group of elective courses
- Pass a comprehensive Clinical Skills Exam
- Pass the USMLE Step 1 and USMLE Step 2 Clinical Knowledge (CK) exams
- Perform all student functions in a professional and ethical manner
- Meet the Technical Standards (observational, communicational, motor, intellectual-conceptual and behavioral/social) as described in the Admission Requirements section
- Complete all requirements within six calendar years, including periods of absence

Combined MD/PhD Program

Introduction

The combined MD/PhD Degree Program is designed for individuals who are strongly motivated to have a career in both academic medicine and research.

Application Procedure

To begin studies as a combined degree student, the applicant must be accepted into both Chicago Medical School (CMS) and the School of Graduate and Postdoctoral Studies (SGPS). There are two application tracks to the combined degree program:

- **Track 1:** The candidate applies simultaneously to both schools during the initial AMCAS entry-level application process. Candidates must indicate their preference on the AMCAS application as “MD/PhD.” Most MD/PhD candidates who are invited to interview by SGPS for the PhD program have at least a 3.75 cumulative GPA (on a 4.0 scale) and 515 or higher score on the MCAT. Accepted MD/PhD candidates are admitted to both CMS
and SGPS. MD/PhD candidates who are not accepted into the combined program will still be considered by CMS for the MD program.

- **Track 2:** Students who have already matriculated into the MD program and have successful research experience, obtained during their medical school education, may choose to apply for the MD/PhD program during their M2 year. If accepted, a student would start in the PhD portion of the program after completing their M2 year.

### Requirements for the Combined MD/PhD Degree

To be awarded the MD/PhD degree from CMS and SGPS, a student must accomplish the following:

- Complete the medical school curriculum, as described above in requirements for the MD degree.
- Complete the SGPS requirements for the PhD degree.

### Special Degree Designations

#### MD with Distinction in Research

This program offers students with a special interest in research the opportunity to pursue a project in depth in either basic or clinical sciences, under the direction of a research mentor. Students are required to submit a written project proposal (with the aid of the mentor), to identify a faculty committee (other than the mentor) to oversee the student’s progress and to submit a final project report with data of publishable quality. Upon satisfactory completion, students receive a certificate and recognition on Awards Day, and a notation appears on the student’s transcript.

#### MD with Distinction in Basic Science

Students with a Basic Science Tally of 89.5% or higher, accumulated from their first two years of coursework, will be recognized as having achieved MD with Distinction in Basic Science. Upon satisfactory completion, students receive recognition on Awards Day, and a notation appears on the student’s transcript.

### Continuing Education

Each year, approximately 10 symposia are sponsored by the Office of Continuing Medical Education (CME) in conjunction with the school departments. In addition, approximately 19 recurring conferences, grand rounds and tumor boards are sponsored by the CME office on campus and at affiliated hospitals.

The content areas of CME activities include (but are not limited to):

- Clinical medical sciences (new, reviewed and investigational)
- Basic sciences (new, reviewed and investigational)
- Theory and practice of healthcare delivery systems
• Education of healthcare professionals including communication skills, bioethics and leadership

These programs provide activities which are evidence-based and designed to produce a change in learner competence and performance, with the goal of improving patient outcomes. CME activities promote leadership within the healthcare field and promote a team-based approach to healthcare delivery.

The CME program is fully accredited with commendation by the Accreditation Council for Continuing Medical Education (ACCME) and provides appropriate credit for the Physician’s Recognition Award of the American Medical Association. Credit is applicable for state medical licensure.

**Graduate and Postdoctoral Education**

**Residency Programs**

- Internal Medicine (James A. Lovell Federal Health Care Center)
- Internal Medicine (Northwestern Medicine McHenry Hospital)
- Psychiatry (James A. Lovell Federal Health Care Center and AMITA Health Saints Mary and Elizabeth Medical Center)

**Fellowship Programs**

- Cardiology
- Interventional Cardiology
- Pulmonary Medicine
- Infectious Disease
- Endocrine Disease

The residency and fellowship programs are primarily based at the James A. Lovell Federal Health Care Center and Centegra Health System.

The training occurs at several affiliate sites including Presence Saints Mary and Elizabeth Medical Center, Mount Sinai Hospital Medical Center in Chicago, Advocate Illinois Masonic Medical Center, Elgin Mental Health Center, Lake County Health Department Community Health Center, Horizon’s Behavioral Health LLC, and Vista Medical Center East.

Chicago Medical School, as the sponsoring institution for these programs, is fully accredited by the Accreditation Council for Graduate Medical Education (ACGME), with the next self-study and site visit in the ACGME’s Next Accreditation System scheduled for April 2024. All the residency and fellowship programs are also fully accredited with commendation.

Chicago Medical School is committed to supporting Graduate Medical Education (GME) programs of the highest caliber. The goal of these programs, consistent with the strategic goals of Chicago Medical School and Rosalind Franklin University of Medicine and Science, is the
training of highly skilled, scholarly physicians whose practices will engender the highest ideals of compassion and professionalism.
College of Health Professions (CHP)

Mission
To prepare exceptional healthcare professionals for leadership and evidence-based practice within a collaborative delivery model through student-centered programs that offer cutting-edge curricula.

Vision
To be a premier Interprofessional Health Sciences College that advances academic excellence, furthers innovative research, serves with integrity, and respects diversity.

Degree Programs
Biomedical Sciences (MS)
Clinical and Lifestyle Nutrition (MS) (online)
Doctor of Nursing Practice in Nurse Anesthesia, Entry (DNP)
Doctor of Nursing Practice in Nurse Anesthesia, Completion (DNP) (online) (teach-out)
Doctor of Physical Therapy (DPT)
Health Administration (MS) (online)
Health Professions Education (MS) (online)
Health Promotion and Wellness (MS) (online) (no longer enrolling students under this program name. All new enrollments are enrolled under the new program name, Lifestyle Medicine)
Interprofessional Healthcare Studies (DSc) (online)
Interprofessional Healthcare Studies (PhD) (online)
Lifestyle Medicine (MS) (online)
Nutrition Education (MS) (online)
Pathologists’ Assistant (MS)
Physician Assistant Practice (MS)
Population Health (MS) (online)
Psychology (PhD)
Psychology: Clinical Counseling (MS)
Psychology: Clinical Psychology (MS)

Online Certificate Programs
Certificate in Health Administration
Certificate in Health Professions Education
Certificate in Lifestyle Medicine
Certificate in Nutrition for Healthcare Professionals
Certificate in Population Health Analytics
Certificate in Population Health Strategies
Non-Degree/Non-Certificate Programs

Pre-Matriculation Program (PMP)

Doctoral Degrees

Doctor of Nursing Practice in Nurse Anesthesia (DNP)

This 36-month entry into practice program was created for Registered Nurses (RN) with a baccalaureate degree who wish to continue their education to become Certified Registered Nurse Anesthetists (CRNA) and earn the Doctor of Nursing Practice (DNP) degree. The program curriculum is delivered in a hybrid fashion, with both online and in-person activities. CRNAs are doctoral-level advanced practice nurses who manage patients’ anesthesia care in every type of setting where anesthesia services are delivered. They collaborate with other healthcare professionals in virtually every area of health care.

Successful students will be awarded a Doctor of Nursing Practice (DNP) degree upon program completion and will be recommended to take the National Certification Exam for Nurse Anesthetists, a requirement for entry to practice as a CRNA.

Mission

The mission of the Doctor of Nursing Practice program is to prepare and educate diverse nurse anesthetists to provide high-quality care in a competent, equitable, and ethical manner. Our vision: “Together transforming the future of nurse anesthesia, to advance health with individuals, families, and communities.” The Department of Nurse Anesthesia realizes its mission within a values-driven culture. This culture emphasizes critical thinking and analysis of ideas; commitment to life in discovery; confidence grounded in humility; and personal responsibility for developing excellence.

Program Accreditation

The program was reviewed by the Council on Accreditation (COA) of Nurse Anesthesia Educational Programs in 2012 for its Master of Science in Nurse Anesthesia program and was awarded the maximum reaccreditation of 10 years without any requirements for progress reports. In 2015, the program was reviewed by the Council on Accreditation of Nurse Anesthesia Educational Programs and approved to award the entry-level DNAP and completion-level DNAP, and to provide up to 100% of its curriculum in a distance education format. The degree title was changed to Doctor of Nursing Practice (DNP) in May 2017 after approval by the Illinois Board of Higher Education and the COA. The next accreditation review is scheduled for May 2022.

The Council on Accreditation of Nurse Anesthesia Educational Programs
222 S. Prospect Avenue
Park Ridge, IL 60068
847-692-7050
accreditation@aana.com
Admission Requirements

Applications for admission into the program are accepted beginning with the published start date for each admission cycle. During each cycle, applicants will be interviewed, and offers of acceptance made, until all available seats in the cohort have been filled. The admission cycle will close on the published date, or sooner, if all seats have been filled—therefore, early application is recommended.

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

DNP (Entry-Level)

The admission requirements for the entry-level DNP degree program are listed below and are in compliance with the requirements established by the Council on Accreditation.

- Submission of all Nurse Anesthesia program application materials by published deadline (or whenever all seats in the class have been filled)
- Submission of all undergraduate- and graduate-level transcripts by published deadline (or whenever all seats in the class have been filled)
- **Grade-Point Average (GPA):** A minimum overall grade-point average (GPA), science GPA, and nursing GPA of 3.0 on a 4.0 point scale are preferred
- **Prior Degree:** A baccalaureate of graduate degree in nursing or an appropriate major
- An unencumbered license as a registered professional nurse and/or an advanced practice registered nurse (APRN) in the United States or its territories or protectorates
- A minimum of 1-year of full-time work experience, or its part-time equivalent, as a registered nurse in a critical care setting. The applicant must have developed as an independent decision maker capable of using and interpreting advanced monitoring techniques based on knowledge of physiologic and pharmacological principles.
- CCRN Certification is highly recommended for a competitive applicant
- **Test of English as a Foreign Language (TOEFL) scores:** Required for applicants who do not hold U.S. citizenship or permanent residency. This requirement may be waived at the program’s discretion
- Interview with the Doctor of Nursing Practice Program Admissions Committee
- **Prerequisite Courses:** There are no required prerequisite courses. Completion of a biostatistics course within the past two years is highly recommended
- **3 Professional references:** Provide contact information for three professional references; submissions of letters of recommendation are not required at the time of application
- **Resume or Curriculum Vitae:** A curriculum vitae (CV) is required as part of the Nursing CAS application
- **Personal Statement:** A personal statement is not required, but applicants are encouraged to submit a diversity statement, history of leadership experience, and other important information about overall life experiences
- **Supplemental Application:** This program does not have a supplemental application
- **Transfer Applicant Policy:** Transfer applicants are not accepted at this time
• **Non-Degree Applicant Policy:** Non-degree applicants will be evaluated on a case-by-case basis.

• **Early Decision Programs:** During each admission cycle, the Department of Nurse Anesthesia interviews applicants, and makes offers of acceptance; the admission cycle will close on the published date, or sooner, if all available seats in the class have been filled. Therefore, early application is recommended.

**DNP (Completion-Level)**

- Submission of all Doctor of Nursing Practice program application materials by the published deadline.
- Submission of all graduate-level transcripts by the published deadline.
- **Grade-Point Average (GPA):** A grade-point average (GPA) of 3.0 on a 4.0 point scale, or higher for graduate level coursework.
- **Prior Degree:** A master’s degree from an accredited institution of higher education prior to matriculation into the program.
- Current national certification as a Certified Registered Nurse Anesthetist.
- Current unencumbered license as a registered nurse in the United States, its territories or protectorates.
- **Prerequisite Courses:** There are no required prerequisite courses. Completion of a biostatistics course within the past two years is highly recommended.
- **Tests:** This program does not require any tests.
- **Letters of Recommendation:** This program does not require any letters of recommendation.
- **Resume or Curriculum Vitae:** This program does not require a resume or curriculum vitae.
- **Personal Statement:** A personal statement is not required.
- **Supplemental Application:** This program does not have a supplemental application.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** This program does not accept non-degree applicants.
- **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

The following technical standard guidelines are based on those recognized as essential to the study and practice of nurse anesthesia. These guidelines specify the attributes considered essential for completing nurse anesthesia training and for enabling each graduate to enter clinical practice.

All students must possess the intellectual, physical, and emotional capabilities necessary to undertake the required curriculum in a reasonably independent manner without having to rely on intermediaries, and that all students must be able to achieve the levels of competence required by the program goals and objectives.
What is the Role of an Individual Certified Registered Nurse Anesthetist?

A Certified Registered Nurse Anesthetist (CRNA) provides care for patients undergoing anesthesia across the lifespan, at all acuity levels, and having surgery of varying complexity, by:

- Performing a history and physical assessment.
- Participating in preoperative teaching and management.
- Preparing for anesthetic management.
- Administering the anesthesia.
- Managing recovery from anesthesia.

CRNAs provide services in conjunction with other healthcare professionals such as surgeons, dentists, podiatrists, and anesthesiologists (http://www.aana.com). To perform these role-related competencies, a Student Registered Nurse Anesthetist (SRNA) must possess abilities and skills that are observational, communicational, motor, intellectual-conceptual (integrative and quantitative), as well as appropriate behavioral and social skills. The use of a trained intermediary is not acceptable in any clinical situation in that it implies that the judgment of the trainee must be mediated by the powers of selection and observation of a third party.

- **Observation:** The SRNA must be able to acquire a defined level of required information as presented through demonstrations and experiences in the basic and applied clinical sciences. Furthermore, a candidate must be able to:
  - Observe a patient accurately, at a distance, and close at hand, with or without medical instrumentation. Acquire information from written documents. Visualize information in images from paper, films, slides or video.
  - Interpret radiographic and other images, in digital or analog representations of physiologic phenomena such as electrocardiograms.
  - Interpret physiologic data from a variety of electronic resources including, but not limited to, physiologic monitors, LCD displays, auditory cues and alarms, and auscultory devices.

  Such observation and information acquisition necessitates the functional use of visual, auditory and somatic sensation while being enhanced by the functional use of other sensory modalities or an alternate means and or abilities to acquire and demonstrate essential information.

- **Communication:** A SRNA must be able to speak (or the functional equivalent), hear and observe patients by sight and sound in order to elicit information, describe changes in affect or physiological status. The SRNA must be able to communicate effectively and sensitively with patients and their families. Anesthesia providers have limited time to establish rapport with their patients, since most surgery is performed on a same-day admission or outpatient basis. Communication includes speech and writing (or the functional equivalent). The SRNA must be able to communicate effectively and efficiently in oral and written forms with all members of the healthcare team.

- **Motor:** A SRNA must possess the motor skills to directly gather physical assessment data, e.g., palpation, percussion, auscultation and other diagnostic and therapeutic
maneuvers, as well as basic laboratory tests. The SRNA must be able to execute motor movements reasonably required to provide general and emergency health care, including airway management, placement of venous access devices, performance of neuraxial and peripheral regional anesthesia blocks, stand for long periods of time, and assist with movement of anesthetized patients. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

- **Intellectual:** The SRNA must be able to rapidly measure, calculate, reason, analyze, integrate and synthesize clinical information, often in stressful situations. The SRNA must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Critical thinking necessary for effective clinical decision making requires these intellectual and psychological skills. In addition, these skills are often required simultaneously in the clinical arena. The SRNA must be able to demonstrate scholarship skills including, but not limited to, the ability to perform extensive literature searches, critically appraise the available research evidence, synthesize information from diverse formats and sources, and cogently express understanding of complex concepts in both verbal and written forms, all while demonstrating high professional, personal, and intellectual integrity.

- **Behavioral and Social Attributes:** The SRNA must possess the emotional health required for full utilization of their intellectual abilities, be able to exercise of good judgment, accomplish prompt completion of all responsibilities related to anesthesia care, and the ability to develop mature, sensitive, and effective relationships with patients and colleagues. The SRNA must exercise good judgment and situational awareness. SRNAs must be able to contribute to collaborative, constructive learning environments; accept constructive feedback from others, and take personal responsibility for making appropriate positive changes. The SRNA must be able to tolerate physically taxing workloads and to function effectively under stress. The ability to adapt to a rapidly changing environment, display flexibility, and learn to function in the face of uncertainties inherent in complex clinical scenarios is essential. Compassion, integrity, altruism, interpersonal skills, interest and motivation are all personal qualities that are assessed during the admission process and then repeatedly during the program of study.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Terminal Doctoral Learning Outcomes**

The doctoral objectives of the entry-level and completion-level DNP degrees are consistent with the 2022 COA learner outcomes for doctoral degrees, which require the doctoral graduate to demonstrate the following learner outcomes or competencies:

**Patient Safety**

- Be vigilant in the delivery of patient care.
• Refrain from engaging in extraneous activities that abandon or minimize vigilance while providing direct patient care (e.g., texting, reading, emailing, etc.).
• Conduct a comprehensive equipment check.
• Protect patients from iatrogenic complications.

Perianesthesia
• Provide individualized care throughout the perianesthesia continuum.
• Deliver culturally competent perianesthesia care.
• Provide anesthesia services to all patients across the life span.
• Perform a comprehensive history and physical assessment.
• Administer general anesthesia to patients with a variety of physical conditions.
• Administer general anesthesia for a variety of surgical and medically related procedures.
• Administer and manage a variety of regional anesthetics.
• Maintain current certification in ACLS and PALS.

Critical Thinking
• Apply knowledge to practice in decision-making and problem-solving.
• Provide nurse anesthesia services based on evidence-based principles.
• Perform a preanesthetic assessment before providing anesthesia services.
• Assume responsibility and accountability for diagnosis.
• Formulate an anesthesia plan of care before providing anesthesia services.
• Identify and take appropriate action when confronted with anesthetic equipment-related malfunctions.
• Interpret and utilize data obtained from noninvasive and invasive monitoring modalities.
• Calculate, initiate and manage fluid and blood component therapy.
• Recognize, evaluate and manage the physiological responses coincident to the provision of anesthesia services.
• Recognize and appropriately manage complications that occur during the provision of anesthesia services.
• Use science-based theories and concepts to analyze new practice approaches.
• Pass the National Certification Examination (NCE) administered by the National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA).

Communication
• Utilize interpersonal and communication skills that result in the effective exchange of information and collaboration with patients and their families.
• Utilize interpersonal and communication skills that result in the effective interprofessional exchange of information and collaboration with other healthcare professionals.
• Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of interprofessional care.
• Maintain comprehensive, timely, accurate and legible healthcare records.
• Transfer the responsibility for care of the patient to other qualified providers in a manner that assures continuity of care and patient safety.
• Teach others.

Leadership
• Integrate critical and reflective thinking in their leadership approach.
• Provide leadership that facilitates intraprofessional and interprofessional collaboration.

Professional Role
• Adhere to the Code of Ethics for the Certified Registered Nurse Anesthetist.
• Interact on a professional level with integrity.
• Apply ethically sound decision-making processes.
• Function within legal and regulatory requirements.
• Accept responsibility and accountability for their practice.
• Provide anesthesia services to patients in a cost-effective manner.
• Demonstrate knowledge of wellness and chemical dependency in the anesthesia profession through completion of content in wellness and chemical dependency.
• Inform the public of the role and practice of the CRNA.
• Evaluate how public policy-making strategies impact the financing and delivery of health care.
• Advocate for health policy change to improve patient care.
• Advocate for health policy change to advance the specialty of nurse anesthesia.
• Analyze strategies to improve patient outcomes and quality of care.
• Analyze health outcomes in a variety of populations.
• Analyze health outcomes in a variety of clinical settings.
• Analyze health outcomes in a variety of systems.
• Disseminate research evidence.
• Use information systems/technology to support and improve patient care.
• Use information systems/technology to support and improve healthcare systems.
• Analyze business practices encountered in nurse anesthesia delivery settings.

Didactic Course Waiver or Transfer Credit
The faculty in the Nurse Anesthesia Program will review any requests for course waiver, or transfer of credit from other institutions, on a case-by-case basis. Tuition for the DNP Nurse Anesthesia program is charged at a flat rate for full-time students, and therefore an approved course waiver/transfer credit application will not alter the tuition paid by a full-time student.

Waiver/Transfer Credit
Only two (2) specific courses (total of 7 QH) within the DNP Nurse Anesthesia curriculum are eligible for transfer credit (course waiver): a) HNAS 725 Advanced Health Assessment; b)
HNAS 912 Leadership, Quality/Safety and Outcomes Management. In order to be eligible for consideration of a waiver for these courses, the following conditions must be met:

- Students wishing to obtain approval for transfer credits must submit their request after acceptance to the program, and before matriculation; requests can be routed first to the Administrative Director for the Department of Nurse Anesthesia.
- Transfer credit must be at the graduate level, and completed at a fully accredited institution of higher education.
- In addition to all other requirements outlined in this section, students seeking transfer credit for HNAS 725 Advanced Health Assessment will be required to successfully demonstrate the ability to perform a Head-to-Toe assessment, and conduct a comprehensive patient history.
- Students must submit a full syllabus and official transcript for the course(s) they are requesting to transfer. In each course, students must have obtained a final course grade of “B” or higher as verified by the transcript.
- The course director (for the course for which transfer credit is being requested) will review all documents to determine if the course is comparable in content and rigor to the DNP offering at RFUMS, and if the student received a grade of no less than “B”.
- If the course director approves the proposed course(s) for transfer, the forms are then submitted to the Chair of the Doctor of Nursing Practice program for final review and approval.

**Program Degree Plan**

**36-Month, Entry-Level Doctor of Nursing Practice Program of Study (RN BS to DNP)**

**Year 1 (55QH)**
- HNAS 701 Principles of Anesthesia I (6QH)
- HNAS 710 Chemistry and Physics in Anesthesia (2QH)
- HNAS 711 Clinical Correlations I (2QH)
- HNAS 720 Advanced Nurse Anesthesia Pharmacology I (2QH)
- HNAS 725 Advanced Health Assessment (4QH)
- HNAS 752 Advanced Physiology and Pathophysiology I (5QH)
- HNAS 753 Advanced Pharmacology I (3QH)
- HNAS 754 Advanced Physiology and Pathophysiology II (5QH)
- HNAS 755 Advanced Pharmacology II (3QH)
- HNAS 901 Translational Research I (3QH)
- HNAS 902 Translational Research II (3QH)
- HNAS 910 Health Policy, Economics and Finance (3QH)
- HNAS 911 Professional Dissemination Skills (2QH)
- HNAX 529 Foundations of Interprofessional Practice (2QH)
- HNAX 563 Clinical Anatomy (10 QH)

**Year 2 (60QH)**
- HNAS 702 Principles of Anesthesia II (6QH)
HNAS 703 Principles of Anesthesia III (5QH)
HNAS 712 Clinical Correlations II (2QH)
HNAS 713 Clinical Correlations III (2QH)
HNAS 714 Clinical Seminar I (1QH)
HNAS 715 Clinical Seminar II (1QH)
HNAS 721 Advanced Nurse Anesthesia Pharmacology II (2QH)
HNAS 722 Advanced Nurse Anesthesia Pharmacology III (2QH)
HNAS 810 Clinical Residency I (12QH)
HNAS 820 Clinical Residency II (12QH)
HNAS 904 Entry-Level Doctoral Project Planning I (2QH)
HNAS 905 Entry-Level Doctoral Project Planning II (2QH)
HNAS 912 Leadership, Quality/Safety and Outcomes Management (3QH)
HNAS 914 Legal Realities of Practice (2QH)
HNAS 921 Entry-Level Doctoral Immersion Residency I (3QH)
HNAS 922 Entry-Level Doctoral Immersion Residency II (3QH)

Year 3 (60QH)
HNAS 716 Clinical Seminar III (1QH)
HNAS 717 Clinical Seminar IV (1QH)
HNAS 718 Clinical Seminar V (1QH)
HNAS 719 Clinical Seminar VI (1QH)
HNAS 830 Clinical Residency III (10QH)
HNAS 840 Clinical Residency IV (12QH)
HNAS 850 Clinical Residency V (12QH)
HNAS 860 Clinical Residency VI (11 QH)
HNAS 913 Professional Role Transition (1QH)
HNAS 923 Entry-Level Doctoral Immersion Residency III (4QH)
HNAS 931 Entry-Level Doctoral Project I (3QH)
HNAS 932 Entry-Level Doctoral Project II (3QH)

24-Month, Completion-Level Doctor of Nursing Practice Program of Study (CRNA to DNP)

Program Degree Plan

Core Courses
HNAS 901 Translational Research I (3QH)
HNAS 902 Translational Research II (3QH)
HNAS 910 Health Policy, Economics and Finance (3QH)
HNAS 911 Professional Dissemination Skills (2QH)
HNAS 912 Leadership, Quality/Safety and Outcomes Management (3QH)
HNAS 914 Legal Realities of Practice (2QH)
HNAS 915 Completion-Level Doctoral Project Planning I (1QH)
HNAS 916 Completion-Level Doctoral Project Planning II (1QH)
HNAS 917 Completion-Level Doctoral Project Planning III (2QH)
HNAS 927 Completion-Level Doctoral Immersion Residency I (3QH)
HNAS 928 Completion-Level Doctoral Immersion Residency II (3QH)
HNAS 929 Completion-Level Doctoral Immersion Residency III (4QH)
HNAS 938 Completion Doctoral Project I (3QH)
HNAS 939 Completion Doctoral Project II (3QH)

Specialty Electives (6QH)

Assessment for Student Learning

Grading for the Didactic Curriculum

The SRNA must maintain:

- A grade no lower than B (3.0 on a 4.0 scale) in all HNAS and HNAX courses
- A grade no lower than C (2.0 on a 4.0 scale) in HNAX 563 Clinical Anatomy
- A cumulative grade-point average of 3.0 on a 4.0 scale for each academic quarter throughout the length of their enrollment. If a student’s GPA should fall below 3.0 at any point during their DNP study, the student will be placed on academic probation and an official remediation plan will be instituted. Students on academic probation will have no more than two subsequent quarters to achieve a GPA of 3.0, or as stipulated in their remediation plan.

Students who do not meet established departmental grading requirements will be subject to dismissal pending due process as outlined in the CHP Student Handbook (Chapter 3: Academic Promotion and Dismissal).

Assessment of student learning is accomplished through the use of traditional examinations, oral presentations and examinations, written scholarly works and simulation experiences.

Grading for HNAS 810-860

Successful completion of any Clinical Residency course (HNAS 810-860) is contingent upon meeting expectations for all clinical residency objectives/performance indicators and completing/submitting required documents. Minimum requirements to receive a passing grade for each Clinical Residency course include:

- A Pass grade on quality care plans as determined by the faculty mentor (required number of care plans to be completed is also determined by the faculty mentor)
- Submission of a minimum of 20 formative evaluations for the first residency, and a minimum of 10 formative evaluations for each succeeding residency (with the exception of Shriners in Chicago)
- Achievement of a minimum rating of “meets expectations” on all summative evaluation performance indicators for each residency
- Completion of an evaluation for each clinical site
Completion of five preceptor evaluations for each clinical site unless the student worked with fewer than five preceptors

Clinical coordinators may dismiss a student from the clinical area for violations of professional standards. Examples of such behavior include but are not limited to: failure to contact the clinical coordinator at least one week before the start of a rotation; failure to prepare for assigned clinical cases; inability to work effectively and safely with assigned clinical preceptors; failure to report to the clinical site or notify the clinical site/program office of absences per program policy; and patient safety violations. Clinical performance or behavior that represents violations of patient care standards, and/or poses a patient safety risk, will result in immediate removal of the student from the clinical rotation. Students may be assigned a failing grade and be subject to dismissal prior to completing the clinical residency due to:

- Egregious ethical violations
- Egregious patient safety violations that result in near misses or negative patient outcomes
- Failure to comply with patient management orders dictated by the supervising nurse anesthetist or anesthesiologist

The overall evaluation of a student’s clinical performance, and determination of a student’s grade for each residency, will be informed by:

- Formative evaluations
- Summative evaluation
- Clinical preceptor communications with program faculty
- Program faculty communications with the student
- Number and type of performance indicators that are below expectations
- Progress toward achievement of performance indicators
- Performance in the simulation lab
- Oral board exam scores

The program administrators have the right and responsibility to determine each student’s final grade. In accordance with the policies and procedures of the College of Health Professions, and the Department of Nurse Anesthesia, students receiving a failing grade of F in any Clinical Residency course are subject to dismissal from the program.

At the earliest indication that a student’s performance in the clinical area is unsatisfactory and inconsistent with the program standards, a meeting with the program administrators will be scheduled. The performance of such students will be reviewed and a course of action will be determined. Potential courses of action include but are not limited to (these courses of action may be concurrent, when applicable):

- Written warning, kept in the file of the involved student
- Remediation, which may include additional simulation lab testing and oral board exams
- Possible reorganization of clinical rotations for the affected student
- Extension of clinical residency training
• Conditional progression to the next clinical rotation. A grade of Incomplete will be posted in the transcript until successful achievement of a satisfactory evaluation from the clinical coordinator and successful achievement of “meets expectations” for all required clinical residency objectives/performance indicators
• Dismissal hearing
• Potential immediate withdrawal from the clinical rotation

Graduation Requirements

• Total quarter hours required for Entry-Level Degree: 175
• Total quarter hours required for Completion-Level Degree: 42
• Satisfactory completion of all program courses is required
• A minimum grade-point average (GPA) of a 3.0 on a 4.0 scale in all courses in the program curriculum
• National Board of Certification and Recertification of Nurse Anesthetists (NBCRNA) Self-Evaluation Examination (SEE) score of no less than established program benchmark for testing period (as defined in Clinical Seminar course series syllabi grading rubric)

Doctor of Physical Therapy (DPT)

The Doctor of Physical Therapy program is a 2.5-year entry-level program that prepares a graduate to practice physical therapy effectively, safely, ethically, and interprofessionally with cultural respect and humility in any type of healthcare environment. The curriculum is designed to provide an in-depth and universal view of the profession, with an emphasis on clinical judgment based on current evidence to meet the evolving needs of society in a culturally responsive manner. Students are guided to develop a lifelong commitment to professional growth and the potential to develop into master clinicians. The program includes academic, clinical and research components in individual and group-learning settings that allow students to explore specialty areas. It is designed for active learners who are skilled at critical thinking.

Program Accreditation

The Doctor of Physical Therapy program at Rosalind Franklin University of Medicine and Science is accredited by the:

Commission on Accreditation in Physical Therapy Education (CAPTE)
3030 Potomac Ave., Suite 100
Alexandria, VA 22305-3085
Telephone: 703-706-3245
Email: accreditation@apta.org
Website: www.capteonline.org

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:
• Applicants must complete an application through the Physical Therapy Centralized Application Service (PTCAS)

• **Prior Degree:** Bachelor’s degree from an accredited college or university or enrollment in a pathway program at an affiliated undergraduate institution

• **Prerequisite Coursework:**
  - General Biology with Laboratory, 6 QH (4 SH)
  - General Chemistry with Laboratory, 12 QH (8 SH)
  - General Physics with Laboratory, 12 QH (8 SH)
  - Anatomy and Physiology with Laboratory, 12 QH (8 SH)
  - Humanities/Social Sciences (must include Psychology), 12 QH (9 SH)
  - English Composition, 4 QH (3 SH)
  - Statistics, 4 QH (3 SH)

Applicants must have a minimum grade of C in the prerequisite courses. Courses with a grade below a C will not fulfill the prerequisite requirements but will be included in grade-point average calculations. Prerequisite coursework in the sciences must have been completed within the last five years. At least two-thirds of the science prerequisites should be completed prior to applying to the program. Transcripts are submitted through the Physical Therapist Centralized Application Service (PTCAS) and only official transcripts will be accepted.

• **Experience:** Demonstration of an interest in and understanding of the field of physical therapy through completion of at least 40 hours of work, volunteer, or observation experience in physical therapy. In addition, dedication to healthcare and science is demonstrated by healthcare or service-related employment, volunteer activity, or prior scholarly research experience.

• **Leadership:** Demonstration of leadership characteristics through academic or community service activities.

• **Communication:** Demonstration of strong oral and written communication skills.

• Criminal background check will be performed on admitted students.

• **Tests:**
  - Applicants are required to complete the Graduate Record Examination (GRE) within five years of application to the program. There is no minimum score required for the GRE.
  - The Test of English as a Foreign Language (TOEFL) examination is required of all foreign applicants whose native language is not English and who have not attended an American college or university full-time for two consecutive years.
  - An official course evaluation for U.S. equivalence report is also required for all applicants who attended a foreign educational program.

• **Letters of Recommendation:** Three letters of recommendation are required for all applicants: one from a licensed physical therapist; one from a science, math or liberal arts professor under which the applicant has studied or completed research; and one from a
work supervisor or a person otherwise uniquely qualified to comment on the applicant’s potential for graduate, health professions study.

- **Resume or Curriculum Vitae:** A resume or curriculum vitae is not required.
- **Personal Statement:** A personal statement is required and completed in PTCAS.
- **Supplemental Application:** This program does not have a supplemental application.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** This program does not accept non-degree applicants.
- **Early Decision Programs:** Early Decision is not available.

**Technical Standards**

**Introduction**

The DPT degree is a broad, undifferentiated degree attesting to general knowledge in physical therapy and the basic skills required to practice physical therapy. Essential abilities and characteristics required for completion of the DPT program consist of certain minimal physical and cognitive abilities and sufficient mental and emotional stability to assure candidates for admission, promotion, and graduation are able to complete the entire course of study and participate fully in all aspects of physical therapy training. The Department of Physical Therapy intends for its graduates to become competent generalists in the physical therapy profession who are capable of meeting the requirements for licensure. For purposes of this document and unless otherwise defined, the term “candidates” means candidates for admission to physical therapy school as well as RFUMS DPT students who are candidates for retention, promotion, or graduation.

The Department of Physical Therapy has a societal responsibility to train competent health care providers who demonstrate critical judgement, extensive knowledge, and well-honed technical skills. The essential skills, abilities, and characteristics described herein are also referred to as technical standards. They are described below in several broad categories including: observation; communication; motor; intellectual-conceptual; and social and behavioral skills. The standards must be met throughout the physical therapy program in order for students to make satisfactory progress and graduate. Candidates and current students who have questions regarding the technical standards or who believe they may need to request reasonable accommodation(s) in order to meet the standards are encouraged to contact the ADA Coordinator.

- **Observation:** Candidates must be able to acquire information from demonstrations and experiences in the basic sciences. Examples include but are not limited to such things as dissection of cadavers; examination of specimens in anatomy and neuroscience; and physiology, pathophysiology, and kinesiology laboratories. Additionally, candidates must be able to acquire information from demonstrations and experiences in clinical skills courses, including but not limited to mobility assessment; movement patterns; transfers; gait patterns; and cardiopulmonary function.
- **Communication:** Candidates must be able to communicate effectively, sensitively, and efficiently with patients, their families, health care professionals, colleagues, faculty, and staff. Candidates must be able to efficiently acquire a patient’s medical history, interpret
non-verbal information, and establish a therapeutic rapport with patients. Candidates are also required to record information accurately and clearly; and communicate efficiently in English with other health care professionals in a variety of patient settings.

- **Motor:** Candidates must be able, after appropriate training, to perform a complete physical examination and clinical interventions. They must be able to respond to clinical situations in a safe manner and provide general physical therapy care.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** Candidates must be able to assimilate detailed and complex information presented in both didactic and clinical course work. Candidates must be able to learn through a variety of modalities including, but not limited to, classroom instruction; laboratory activities; small group, team, and collaborative activities; individual study; preparation and presentation of reports; simulations, and use of computer technology. The candidates must be able to measure, calculate, reason, analyze, integrate, and synthesize. In addition, they must be able to comprehend three-dimensional relationships and understand the spatial relationship of structure. Candidates must also be able to formulate and test hypotheses that enable effective and timely problem solving in diagnosis, treatment, or referral of patients in a variety of clinical settings and health care systems.

- **Behavioral and Social Attributes:** Candidates must demonstrate the maturity and emotional health required for the full utilization of their intellectual abilities. They must accept responsibility for learning, exercising good judgement and complete all responsibilities attendant to their curriculum and to the physical therapy diagnosis and care of patients. Candidates must display characteristics of integrity, honesty, attendance and conscientiousness, empathy, a sense of altruism, and a spirit of cooperation and teamwork. They must understand the legal and ethical aspects of the practice of physical therapy and function within both the law and ethical standards of the physical therapy profession. Candidates must be able to interact with patients and their families, health care personnel, colleagues, faculty, staff, and all other individuals with whom they come in contact with in a courteous, professional, and respectful manner. The candidate for the DPT degree must accept responsibility for learning and exercise good judgement. Candidates must be able to contribute to collaborative, constructive learning environments; accept constructive feedback from others; and take personal responsibility for making appropriate, positive changes. Candidates must be able to function in a competent and professional manner under highly stressful situations. Candidates must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent to clinical problems of patients.

The American with Disabilities Act (ADA), enacted in July of 1990, protects any individual with a physical or mental impairment that substantially limits that person in some major life activity and any individual who has a history of, or is regarded as having, such an impairment. Under the ADA, as with Section 504 of the Vocational Rehab Act, universities and colleges are prohibited from discriminating against an otherwise qualified person with a disability in all aspects of academic life. Schools must make reasonable accommodations for the known physical or mental disabilities of otherwise qualified individuals. The University need not make an accommodation
that would cause an undue burden. The philosophical basis of the ADA, that judging persons on their abilities and achievements rather than their potential disabilities, runs parallel to the traditional philosophy of this University.

The Department of Physical Therapy has developed the above list of Technical Standards of behavior in order to support the “essential requirements” of its curriculum. In decisions on admission, evaluation, promotion, and graduation of any person, and especially an applicant or student with a disability, it is the obligation of the student to meet these minimum technical standards, with or without reasonable accommodation.

It is the responsibility of a candidate with a disability, or a candidate that develops a disability, who requires accommodations in order to meet these technical standards or any other academic requirements, to self-disclose to the ADA Coordinator and engage in an interactive process. For further information on these Technical Standards and the procedures for their implementation, interested persons are encouraged to contact the ADA Coordinator at 847-578-8482.

**Transfer Credits and Advanced Standing**

No transfer credits or advanced standing will be awarded regardless of previous experience.

**Core Competencies**

Upon completion of the DPT program, the graduate will:

- Demonstrate excellence in interprofessional, person-centered, culturally responsive physical therapy practice.
- Promote excellence in scientific inquiry and discovery.
- Have a sense of professional duty that includes a responsibility to engage in service aligned with current and future societal health care needs.

**Program Degree Plan**

**Year 1 (71QH)**

- HPTH 618 Orientation to Physical Therapy (4QH)
- HPTH 620 Clinical Skills I (5QH)
- HPTH 622 Critical Inquiry I (3QH)
- HPTH 623 Practice Issues I (1QH)
- HPTH 630 Clinical Skills II (3QH)
- HPTH 631 Clinical Skills III (3QH)
- HPTH 634 Orthopedic Clinical Medicine (3QH)
- HPTH 635 Kinesiology/Motor Control I (3QH)
- HPTH 636 Kinesiology/Motor Control II (4QH)
- HPTH 640 Clinical Skills IV (5QH)
- HPTH 642 Critical Inquiry II (3QH)
- HPTH 643 Practice Issues II (2QH)
- HPTH 644 Neurological Clinical Medicine and Pharmacology (3QH)
- HPTH 645 Clinical Physiology (6QH)
HPTH 646 Fundamentals of Physiology (4QH)
HPTX 529 Foundations for Interprofessional Practice (2QH)
HPTX 532 Leadership in the Health Care Environment (2QH)
HPTX 563 Clinical Anatomy (10QH)
HPTX 579 Neuroscience (5QH)

**Year 2 (61QH)**

HPTH 716 Clerkship I (10QH)
HPTH 718 Clerkship II (14QH)
HPTH 720 Clinical Skills V (4QH)
HPTH 721 Clinical Skills VI (3QH)
HPTH 722 Critical Inquiry III (1QH)
HPTH 724 Advanced Clinical Medicine and Pharmacology (5QH)
HPTH 725 Advanced Regional Anatomy (2QH)
HPTH 740 Clinical Skills VII (3QH)
HPTH 741 Pediatric Physical Therapy (4QH)
HPTH 742 Physical Therapy in the Critical Care Sector (2QH)
HPTH 743 Practice Issues III (1QH)
HPTH 744 Prosthetics/Orthotics (3QH)
HPTH 747 Cardiovascular and Pulmonary Physical Therapy Part I (3QH)
HPTH 748 Cardiovascular and Pulmonary Physical Therapy Part II (2QH)
HPTH 749 Critical Inquiry IV (1QH)
HPTH 823 Practice Issues IV (3QH)

**Year 3 (25QH)**

HPTH 835 Clerkship III (12QH)
HPTH 843 Practice Issues V (1QH)
HPTH 848 Professional Practicum (12QH)

**Assessment for Student Learning**

**Grading System**

The DPT program awards course grades using the following scale:

- A  4.00
- B  3.00
- C  2.00
- F  0.00

**Assessment Methods**

Students are expected to maintain a 2.75 out of 4.0 grade-point average throughout the program.
Assessment methods are varied and depend on the class and instructor. Methods include written, oral, and practical examinations, individual and groups assignments and presentations, clinical case studies, reflective writings, and laboratory and discussion participation.

Clinical performance is assessed with the American Physical Therapy Association Clinical Performance Instrument (CPI).

**Graduation Requirements**

Students must meet the following program requirements:

- 157 quarter hours of required degree program coursework
- A minimum 2.75 grade-point average (GPA) on a 4.0 scale in all courses in the program curriculum
- Successful completion of all course and program requirements within two and a half years is anticipated, with up to a maximum of five years from the date of matriculation to complete the degree.

**Continuing Education**

The Department of Physical Therapy offers a number of continuing education offerings for practicing physical therapists each year.

**Graduate and Postdoctorate Education**

In collaboration with the Manual Therapy Institute, the Department of Physical Therapy co-sponsors two programs in orthopedic manual physical therapy for practicing physical therapists. The certificate program consists of 191 hours of coursework over 2.5 years and culminates in award of a certificate in Orthopedic Manual Therapy. The fellowship program includes an academic curriculum of 17 onsite weekend courses, as well as 5 online home study courses and a clinical component including a minimum of 17 months, a maximum of 36 months, with 440 supervised clinical hours. The fellowship program culminates in Fellow status in the American Academy of Orthopedic Manual Physical Therapists (AAOMPT).

**Interprofessional Healthcare Studies (PhD/DSc)**

**Program Introduction**

The Doctor of Science (DSc) or Doctor of Philosophy (PhD) in Interprofessional Healthcare Studies programs provide an opportunity for existing practitioners from various healthcare disciplines or health professions education to advance their knowledge and skills related to their professional positions. We recognize that such individuals are typically employed full-time and may also have family or other responsibilities that compete for their time. For that reason, our students study fully online in an interprofessional curriculum focusing on bridging the healthcare professions through courses that address contemporary and emerging topics. We use delivery modes and a cohort model that facilitate attendance and involvement in learning activities, and accomplishment of course requirements. The programs emphasize the development of scholarly, evidence-based skills to improve interprofessional health professions education and practice, and
allows students to select an emphasis that interests them through selection of either a PhD or DSc, and the opportunities for elective courses that support the student’s area of interest. Students may choose either the DSc which emphasizes simulation-based education or the PhD which focuses on interprofessionalism in education and practice.

**Doctor of Science**

The 61 quarter hour DSc program emphasizes gaining interprofessional simulation-based education skills, giving practicing clinicians and educators the knowledge to teach both clinical and teamwork skills in a controlled environment. The DSc culminates in either a traditional dissertation OR a simulation education research project suitable for publication or presentation in a peer-reviewed environment. Students may take up to seven years to complete the program from the time of matriculation into the program.

**Doctor of Philosophy**

The 64 quarter hour PhD program emphasizes integration of interprofessional theory into healthcare practice and education for already practicing healthcare providers and educators. The PhD program culminates in a publishable, quality dissertation research project. Students may take up to seven years to complete the program from the time of matriculation into the program.

**Admission Requirements**

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prerequisite:** Grade of B or higher in a graduate level statistics course.
- **Prior Degree:** Master’s degree or clinical doctorate in a healthcare related field such as physical therapy, occupational therapy, nutrition, physician assistant studies, nursing, clinical laboratory sciences or others from an accredited college or university
- **Grade-Point Average (GPA):** Minimum cumulative grade-point average (GPA) 3.0 on a 4.0 scale in the master’s degree or professional doctorate
- **Be a licensed, registered, certified or otherwise credentialed healthcare professional in the United States.**
- **At least two years of experience in their professional discipline**
- **Tests:**
  - The Test of English as a Foreign Language (TOEFL) may be required if:
    - The student entering who earned a master’s degree outside the U.S. and/or who does not hold U.S. Citizenship or permanent residency must present proof of English proficiency via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22
    - Test scores must be a test date within two years of the date from when a complete application is submitted
The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.

- Letters of Recommendation: Two letters of recommendation are required from those who are familiar with the applicant’s academic abilities and can speak to the applicant’s potential to succeed in a doctoral program.
  - Students who completed a master’s degree at RFU must also present a letter of support from the Department Chair of their master’s program. (This applicant would submit a total of 3 letters.)
- Personal Statement: Applicants are required to submit a statement indicating why they wish to enroll in the program.
- Writing Sample: Applicants are required to submit a self-selected example of which they are the sole author that they consider to be their best written work demonstrating the applicant’s ability to think and write critically.
- Resume or Curriculum Vitae: A resume or curriculum vitae is required.
- Supplemental Application: This program does not have a supplemental application.
- Transfer Applicant Policy: This program does not accept transfer applicants.
- Non-Degree Applicant Policy: This program may accept At-Large Students when able.
- Early Decision Programs: This program does not accept early decision applicants.

Technical Standards
A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- Observation: The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and
using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects in both verbal and recorded format (writing, typing, graphics or telecommunication).

- **Motor:** The candidate must be able to participate in lengthy written discussions and compose lengthy written assignments and projects. For any required research the candidate needs to be able to carry out and report on a research project. Working in an online course environment requires that the candidate be able to remain at the computer for prolonged intervals.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

This program does not accept transfer credits earned from other institutions prior to admission to the program.

**Core Competencies**

Students in the DSc program will learn to:

- Practice in an interprofessional manner to model collaborative health care and health professions education
- Teach using interprofessional praxis and theory
- Engage in scholarly activity
- Provide leadership in the development of interprofessional healthcare practice and education
- Engage in collaborative research
Students in the PhD program will learn to:

- Practice in an interprofessional manner to model collaborative health care and health professions education
- Teach using interprofessional praxis and theory
- Engage in scholarly activity
- Provide leadership in the development of interprofessional healthcare practice and education
- Engage in collaborative research to contribute to theory in the field of interprofessional practice/education

**Program Degree Plan – Doctor of Philosophy**

Regular Schedule- Designed to be completed in 3 years. Students must register with their cohort for the 6 QH designated for the regular cohort each quarter.

Limited Schedule – Designed to be completed in 5.5 years. Students must register with their cohort for one course that is designated for the limited schedule cohort each quarter with exception of the first quarter.

**Year 1 (18QH)**

HIPS 560 Research Design (4QH)
HIPS 563A Writing for Scholars I (1QH)
HIPS 563B Writing for Scholars II (2QH)
HIPS 570 Qualitative Research (2QH)
HIPS 600 Introduction to Doctoral Studies and Interprofessionalism (4QH)
HIPS 603 Interprofessional Theory Seminar (4QH)
HIPS 631 Foundations in Interprofessional Research I – Emerging Topics (1QH)

**Year 2 (24QH)**

HIPS 562 Measurement Principles (4QH)
HIPS 601 Interprofessional Education Seminar (4QH)
HIPS 602 Interprofessional Practice Seminar (3QH)
HIPS 632 Foundations in Interprofessional Research II – Methods (2QH)
HIPS 633 Foundations in Interprofessional Research III – Project Design (2QH)
HIPS 711 Building Effective Interprofessional Teams (3QH)
Electives (6QH)

**Year 3 (22QH)**

HIPS 731 Interprofessional Research Practice I – Institutional Review Boards (3QH)
HIPS 732 Interprofessional Research Practice II – Conducting Research (8QH)
HIPS 733 Interprofessional Research Practice III – Analyzing Data (2QH)
HIPS 734 Interprofessional Research Practice IV – Drawing Conclusions from Data (2QH)
HIPS 735 Interprofessional Research Practice V – Disseminating Research (3QH)
HIPS 736 Interprofessional Research Practice VI – Defending Research (1QH)
Electives (3QH)

Program Degree Plan – Doctor of Science

Regular Schedule- Designed to be completed in 3 years. Students must register with their cohort for the 6 QH designated for the regular cohort each quarter.

Limited Schedule – Designed to be completed in 5.5 years. Students must register with their cohort for one course that is designated for the limited schedule cohort each quarter with exception of the first quarter.

Year 1 (18QH)
HIPS 560 Research Design (4QH)
HIPS 563A Writing for Scholars I (1QH)
HIPS 563B Writing for Scholars II (2QH)
HIPS 570 Qualitative Research (2QH)
HIPS 631 Foundations in Interprofessional Research I – Emerging Topics (1QH)
HIPS 740 Foundations in Simulation Enhanced Health Professions Education (4QH)
HIPS 741 Application of Simulation Design for Clinical Educators (4QH)

Year 2 (24QH)
HIPS 562 Measurement Principles (4QH)
HIPS 601 Interprofessional Education Seminar (4QH)
HIPS 632 Foundations in Interprofessional Research II – Methods (2QH)
HIPS 633 Foundations in Interprofessional Research III – Project Design (2QH)
HIPS 711 Building Effective Interprofessional Teams (3QH)
HIPS 723 Leadership in Interprofessional Education (3QH)
HIPS 742 Leadership in Healthcare Simulation (3QH)
Electives (3QH)

Year 3 (19QH)
HIPS 731 Interprofessional Research Practice I – Institutional Review Boards (3QH)
HIPS 732 Interprofessional Research Practice II – Conducting Research (6QH)
HIPS 733 Interprofessional Research Practice III – Analyzing Data (2QH)
HIPS 734 Interprofessional Research Practice IV – Drawing Conclusions from Data (2QH)
HIPS 735 Interprofessional Research Practice V – Disseminating Research (2QH)
HIPS 736 Interprofessional Research Practice VI – Defending Research (1QH)
Electives (3QH)
Assessment for Student Learning

Grading System

A 4.00 High Achievement
B 3.00 Above Average Achievement
C 2.00 Average Achievement
F 0.00 Failure

Grades without Associated Grade Points:

P  Pass
F  Fail

The minimum passing grade at the end of all courses in the program is a B. Students who achieve less than a B at the end of a course are subject to dismissal from the program. The main paper/project for each course must also achieve a B or better in order for the student to pass the course, even if the student is otherwise passing.

Assessment Methods

Assessments in this program are multi-faceted and may include but are not limited to written papers, submission of articles to peer-reviewed journals, discussion board postings, individual or group projects, portfolio compilation and presentation, data analysis, practicums, and completion and defense of a doctoral dissertation or research project.

Graduation Requirements

Students must meet the following program requirements to graduate:

- Successful completion of all courses/program requirements and a minimum of 61(DSc) to 64 (PhD) quarter hours beyond the master’s degree. (Some dissertation work may exceed the minimum quarter hours.)
- Successful completion and defense of an approved capstone scholarly project or dissertation
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
- Successful completion of all course requirements within seven years from the date of matriculation

Psychology (PhD)

The Clinical Psychology training program integrates academic, scientific and professional training and offers the Doctor of Philosophy degree and is defined by the scientist-practitioner model. In keeping with the scientist-practitioner model, we believe that clinical psychologists should be both scientists, knowledgeable in formulating and solving scientific problems, and practitioners experienced in the use of empirically supported clinical techniques. The program provides students with intensive instruction in the theoretical framework of psychology and
broad experience in methods of practice of clinical psychology. The graduates of this program are capable of functioning as an investigator and as a practitioner. Within the context of a general clinical psychology training program, our program offers focused training in Neuropsychology, Health Psychology and Psychopathology.

Program Accreditation

The Psychology program is accredited by the American Psychological Association (APA).

Questions related to the program’s accredited status should be directed to the Commission on Accreditation (COA):

Office of Program Consultation and Accreditation
American Psychological Association
750 1st Street, NE
Washington, DC 20002
202-336-5979
apaaccred@apa.org
www.apa.org/ed/accreditation

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degrees:** BA or BS degree from an accredited college or university.
- **Prerequisite Courses:** Adequate preparation in psychology: at least 15 credit hours of psychology, including a course in statistics.
- **Minimum Grade-Point Average:** Minimum grade-point average of 3.2 on a 4.0 scale for the last two years of undergraduate study.
- **Graduate Record Examination:** Graduate Record Examination (GRE) is not required.
- **Letters of Recommendation:** Three letters of reference from former professors or employers familiar with the applicant’s professional or educational capabilities are required. Preferably, two letters should be from former professors.
- **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
- **Personal Statement:** A personal statement is required.
- **Supplemental Application:** This program does not have a supplemental application.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** This program does not accept non-degree applicants.
- **Early Decision Programs:** This program does not participate in an early decision process.

Technical Standards

Candidates for entry into the Clinical Psychology doctoral program must possess certain abilities and skills to function effectively and meet the ethical and technical requirements in a broad variety of classroom, laboratory, research and clinical settings. These essential functions are:
• Observational skills
• Communication skills
• Motor skills
• Intellectual-conceptual (integrative and quantitative) abilities
• Behavioral and social attributes

Each candidate will be reviewed individually. The Admissions Committee requests that the candidate examine the required qualities and understand the school’s expectations prior to accepting an offer of admission.

Many disabilities can be accommodated reasonably and without undue hardship. The purpose of this document is to act as a benchmark for the capabilities and skills needed in a candidate for the Clinical Psychology doctoral program.

• **Observational:** The candidate must be able to acquire a defined level of required information as presented through lectures, demonstrations and experiences in basic and applied psychology. Furthermore, a candidate must be able to observe a patient or research subject accurately, at a distance and close at hand, using their senses of sight, smell, touch and hearing. The candidate must be able to acquire information from written documents or electronic media, such as a computer monitor. The candidate must be able to visualize information from paper, films, slides or video. Such observation and information acquisition necessitates the functional use of visual, auditory and somatic sensation while being enhanced by the functional use of other sensory modalities. In any case where a candidate’s ability to observe or acquire information through these sensory modalities is compromised, the candidate must demonstrate alternative means and/or abilities to acquire and demonstrate the essential information conveyed in this fashion. If the alternatives are acceptable, it is expected that obtaining and using such alternative means and/or abilities shall be the responsibility of the student. Costs of necessary accommodations should be reasonable and will be borne by the university when not the responsibility of the student or otherwise funded.

• **Communication:** A candidate must be able to speak, hear and observe by sight in order to elicit information, observe patients/clients, describe changes and perceive nonverbal communications. Communication includes verbal and recorded format (writing, typing, graphics or telecommunication). A candidate is expected to independently take paper, computer, practical and comprehensive examinations. A candidate must be able to communicate effectively and sensively with faculty, fellow students, staff, research subjects, patients, families and other members of the healthcare team. Communication includes speech and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the healthcare team. Communication via electronic media (e.g., computer terminals utilizing a keyboard) is required.

• **Motor and Sensory Systems:** It is required that candidates possess the motor skills necessary to directly perform basic clinical tests, diagnostic procedures and research procedures. Such actions require coordination of both gross and fine muscular
movements, equilibrium and functional use of the senses of touch and vision. This requirement also includes but is not limited to the use of an electronic keyboard. Candidates must be able to move freely and safely about a research or clinical setting and reach across desktops or on top of shelves. The student must be able to travel (utilizing public or private transportation) to clinical affiliate sites or to research sites. Furthermore, the student must perform moderately taxing continuous physical work, often requiring prolonged sitting or standing, over several hours.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. In addition, the candidate must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Problem-solving, the critical skill demanded of all healthcare professionals, requires all of these intellectual abilities. The candidate must be able to perform these problem-solving skills in a timely fashion.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, prompt completion of all responsibilities attendant to working with patients/clients and research subjects, and the development of mature, sensitive, ethical and effective professional relationships with co-workers. The candidate must be able to tolerate physically-taxing workloads and function effectively under variable levels of stress, which may at some points reach a high level of intensity for protracted periods. Some students will take courses that require them to be able to adapt to working with biological substances (e.g., formaldehyde-preserved human tissue). Students must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in clinical problems and situations. The student must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues to improve. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that will be assessed during the admissions and educational process. The student must consistently behave in an ethical and professional manner and comport themselves in a manner consistent with published Ethical Codes of Conduct relevant to their profession.

Note: If a candidate’s ability to acquire and communicate information through vision, hearing or sensory modalities is impaired, they must demonstrate alternative means and/or abilities to assimilate the information and demonstrate that the essential information can be conveyed in this fashion. If the alternatives are acceptable, it is expected that the obtaining and using of such alternative means shall be the shared responsibility of the student and the university. It must be a reasonable accommodation and not an undue hardship for the university.

An effort will be made to work out potential difficulties as long as this does not pose a threat to the well-being of patients, research subjects, other students, faculty, other healthcare team members or the candidate themselves.
If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

**Transferring credit for required courses**

The limit for waiver of required courses is 10 credit hours (quarter hours). However, the faculty reserves the right to make exceptions for individual students, under exceptional circumstances, who petition the department for an additional exemption to this.

Students who wish to transfer credit for one or more Departmental courses should submit a formal petition to their advisor for each course they wish to waive. With the exception of the fall quarter of the first year, these petitions must be submitted at least 4 weeks prior to the quarter in which each course in question is offered. All petitions should be submitted within the first two years of the doctoral program. The petition will include transcripts and syllabi of courses they attended in their master’s program or other post-baccalaureate program. Students are not allowed to transfer credits from courses based on their pre-baccalaureate training. Students must have earned a “B” or better for faculty to consider waiving a department course requirement. With the advisor’s approval, the petition will be forwarded to the course instructor. The advisor and department faculty member offering the course in question will evaluate a syllabus with a view toward whether the course taken by the student covered material that is consistent with a scientist-practitioner approach, covers the relevant material in the department course, and provides the knowledge-base needed for the student to pass departmental comprehensive exams. If the faculty judges the previously completed course meets all requirements, then the paperwork will be completed to document the transfer of credit. Transfer credit documentation will include the previously taken course syllabi, and a summary of evidence of mastery. The department chair will review the documentation and provide final approval.

**Transferring credit for elective courses**

Students who have formally registered for and successfully completed one or more graduate courses at accredited universities, prior to entry into our program, may transfer up to 10 quarter hour credits toward electives. The courses to be transferred must not be redundant with current core course offerings. The faculty will recommend such action to the Dean for approval.

Incoming students with a master’s degree may also receive credits toward electives. This policy applies to elective courses that were taken for other reasons than earning a master’s degree, but which were beyond the requirements for the bachelor’s degree. Students will write a formal petition that specifies for which elective courses they wish to get credit. The petition will include transcripts and syllabi of the courses they attended in their master’s program. The Chair, in consultation with relevant faculty and/or the Director of Clinical Training, will make decisions regarding the granting of elective credits. However, the faculty reserves the right to make exceptions for individual students, under exceptional circumstances, who petition the department for an additional exemption to this.
Core Competencies

The program’s broad aim to prepare highly competent Health Service Clinical Psychologists is reflected in six training objectives for our students:

**Objective 1**: Prepare doctoral level Clinical Psychologists who will be innovative researchers and clinicians within the scientist-practitioner model and possess broad knowledge of the science of psychology.

**Objective 2**: Prepare doctoral level Clinical Psychologists with specific knowledge of and high levels of competency in clinical assessment and intervention. Program graduates will have a sophisticated understanding of the assessment of and empirically supported clinical interventions for psychopathology.

**Objective 3**: Prepare doctoral level Clinical Psychologists who have a broad knowledge about behavioral science research, as well as experience planning, executing, and evaluating research. Program graduates will contribute to the dissemination of scientifically and societally important clinical research.

**Objective 4**: Prepare doctoral level Clinical Psychologists who can work effectively in integrated behavioral healthcare settings as members of interprofessional healthcare teams.

**Objective 5**: Prepare doctoral level Clinical Psychologists who are aware of and sensitive to cultural and individual differences. Program graduates will effectively apply their knowledge of a broad range of individual differences to the clinical work, their research, and in their professional relationships.

**Objective 6**: Prepare doctoral level Clinical Psychologists who know, respect and adhere to the ethical standards of the profession. Program graduates will model appropriate and ethical conduct in all professional activities.

Program Degree Plan

**Core Courses (73.5 QH)**

- HPSC 510 Psychological Statistics I (5 QH)
- HPSC 511 Psychological Statistics II (4 QH)
- HPSC 515 Experimental Design and Program Evaluation (4 QH)
- HPSC 520 Descriptive Psychopathology (4.5 QH)
- HPSC 521 Theoretical Psychopathology (3 QH)
- HPSC 541 History and Systems (2QH)
- HPSC 560 Cognition and Cognitive Assessment (4 QH)
- HPSC 575 Social Psychology (3 QH)
- HPSC 576 Essentials of Physiological Psychology and Behavioral Neuroscience (3 QH)
- HPSC 577 Socio and Cultural Basis of Behavior (4.5 QH)
- HPSC 664 Personality Assessment (4 QH)
- HPSC 668 Theories of Personality and Emotion (3 QH)
- HPSC 669 Theories of Counseling and Psychotherapy (4.5 QH)
HPSC 690 Cognitive and Behavioral Interventions (5 QH)
HPSC 750 Advanced Physiological Psychology Lab (1 QH)
HPSC 751 Health Psychology: Cognitive, Affective, & Physiological Bases for Behavior (4 QH)
HPSC 754 Lifespan Developmental Psychology (4.5QH)
HPSC 757 Ethical Issues and Professional Standards in Clinical Psychology (4.5 QH)
HPSC 784 Professional Seminar in Clinical Fundamentals (4 QH)
HPSX 529 Foundations for Interprofessional Practice (2 QH)

**Concentration Courses (13QH)**

*Neuropsychology concentration:*
HPSC 503 Advanced Specialty Training Seminar: Neuropsychology (3 QH)
HPSC 567 Neuropsychological Assessment (4 QH)
HPSC 574 Neuropsychological Models of Cognition and Emotion (3 QH)
Electives (3 QH)

*Health Psychology concentration:*
HPSC 502 Advanced Specialty Training Seminar: Health Psychology (3 QH)
HPSC 573 Health Psychology: Psychological Comorbidities of Physical Illness (4 QH)
Electives (6 QH)

*Psychopathology concentration:*
HPSC 501 Advanced Specialty Training Seminar: Psychotherapy (3 QH)
Electives (10 QH)

**Practica (147 QH)**
HPSC 610 Clinical Practicum Supervision (3 QH) – Year 2
HPSC 800 Clinical Practicum (36 QH)
HPSC 810 Clinical Practicum Supervision (3 QH) – Year 4
HPSC 850 Research Practicum (21 QH)
HPSC 890 Dissertation Research (36 QH)
HPSC 891 Internship (48 QH)

**Assessment for Student Learning**

**Grading System**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>High Achievement</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Above Average Achievement</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Average Achievement</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure</td>
</tr>
</tbody>
</table>
Grades without Associated Grade Points:

P    Pass
F    Fail

Practicum experiences are graded as Pass/Fail.

Assessment Methods

Additional methods utilized to assess student learning include:

- Annual review of progress of all students by full faculty
- Research and methods comprehensive examination during second year of program
- Clinical comprehensive examination during the third year of program
- Successful completion of master’s thesis that includes required submission for publication
- Successful defense of doctoral dissertation
- Successful completion of yearlong clinical internship

Graduation Requirements

Graduation Requirements

- Total program-specific quarter hours for degree: 233.5
- Successful completion of all required courses in the program curriculum and an approved group of elective courses within seven years from the date of matriculation
- A minimum of 1,000 clinical practicum pre-internship hours
- Completion of a master’s thesis research project*
- Passing the comprehensive examinations
- Completion of a dissertation proposal and satisfactory oral defense of the dissertation
- Successful completion of the internship year
- Completion of an APA/APPIC approved internship
- Good academic standing defined by an overall average of B or better

*Incoming students with a master’s degree may have this requirement waived provided a master’s thesis research project was previously completed and deemed acceptable by the faculty.

It is important to note that these are minimum requirements and final determination of the adequacy and completion of students’ coursework and training rests with the department. At the discretion of the department, a student may be required to take additional courses and/or training.

Continuing Education

The Department of Psychology offers its faculty and clinical supervisors CEU credit through attendance at bimonthly colloquium lectures.
Master of Science Degrees

Biomedical Sciences (MS)

The mission of the Master of Science in Biomedical Sciences (BMS) program is to provide students with opportunities that will prepare them to continue their graduate education in a variety of healthcare professions (including allopathic medicine, osteopathic medicine, podiatric medicine, dentistry and physician assistant studies) by providing a rigorous background in the biomedical sciences. The program also provides an opportunity for students to earn a certificate in one of the following fields: health administration, or population health strategies. The BMS program is a one-year (10 month) program.

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- Applicants must complete an application via the Rosalind Franklin University Centralized Application Service (RFUCAS).
- **Prior Degree:** To be considered for admission, you must have a BA or BS or complete the requirements for a degree before enrollment. The degree must be from a regionally-accredited institution.
- **Prerequisite Courses (C or better):**
  - Biology or Zoology with accompanying labs (1 year/2 semesters)
  - Inorganic/General Chemistry with accompanying labs (1 year/2 semesters)
  - Organic Chemistry with accompanying lab (1 semester)
  - Physics with accompanying lab (1 year/2 semesters)
  - Composition (writing intensive) (1 semester)
  - Behavior and/or Social Science (such as Introduction to Psychology and Introduction to Sociology) (2 courses)
    The Admissions Committee also recommends, though does not require, coursework in biochemistry, molecular biology and statistics.
- **Test Scores:** Competitive scores on a standardized exam that are no more than three years old such as DAT, GRE or MCAT. Applicants who indicate career interest in Allopathic or Osteopathic Medicine must earn a score of 496 or higher prior to matriculation into the BMS program
- **Grade-Point Average (GPA):** Competitive overall and science GPAs.
- **CASPer Examination:** All applicants are required to complete and submit a CASPer score for that application cycle.
- **Letters of Recommendation:** Either one committee letter or three individual letters of recommendations from persons involved in the student’s previous educational experience are required.
• **Experience:** Demonstration of interest in and understanding of the medical field and its various components. The motivation and commitment to health care, as demonstrated by previous employment, volunteer work or other experiences.

• **Leadership:** Demonstration of leadership characteristics through academic or community service activities.

• **Volunteering:** Demonstration of a commitment to public service through a variety of humanitarian activities.

• **Communication:** Demonstration of strong oral and written communication skills.

• **Resume or Curriculum Vitae:** Included in the RFUCAS application.

• **Personal Statement:** Included in the RFUCAS application.

• **Supplemental Application:** This program does not have a supplemental application.

• **Transfer Applicant Policy:** This program does not accept transfer applicants.

• **Non-Degree Applicant Policy:** This program does accept non-degree applicants.

• **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for the MS degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to acquire information as presented through demonstration and experiences in the basic sciences. This includes information conveyed through physiological and pharmacological demonstrations in animals, microbiological cultures and microscopic images of microorganisms and tissues in normal and pathological states. Furthermore, a candidate must be able to:
  
  o Observe experimental results or subjects accurately, acquire information from written documents and visualize information as presented in images from paper, films, slides, video or other forms of modern electronic media.
  
  o Interpret graphic images and other forms of data readout (such as oscilloscopes, computer screens, gels, etc.) with or without the use of assistive devices.

  In any case where a candidate’s ability to observe or acquire information is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student.

• **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively with research subjects, faculty, staff and colleagues.

• **Motor:** The candidate must possess the motor skills necessary to design and perform laboratory experiments and statistical analysis of collected data.

• **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. The candidate must be able to utilize these problem-solving skills in a timely fashion.

• **Behavioral and Social Attributes:** The candidate must work to their fullest potential while exercising good judgment. They must be able to function effectively in stressful
situations and adapt to changing environments. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities required for a successful scientific career, and are assessed during the admissions and educational process.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credits or advanced standing will be awarded regardless of previous experience. No credit will be given for prior learning experience. No credit can be earned through proficiency examinations.

**Core Competencies**

Upon completion of the Master of Science in Biomedical Sciences program, the student will:

- Demonstrate the ability to be academically successful within a graduate medical curriculum
- Have an understanding of the various Health Professions programs available to continue graduate education
- Have an introductory knowledge of Interprofessional health care
- Enhance skills related to student success such as study strategies, learning styles, interviewing skills, etc.
- Develop additional healthcare knowledge by completing a certificate in a desired field

**Program Degree Plan**

**Core Courses (33QH)**

- HBMS 501 Introduction to Interprofessional Health Care (2.5QH)
- HBMS 502 Foundations of Clinical Medicine (3QH)
- HBMS 503 Clinical Molecular Cell Biology (3.5QH)
- HBMS 504 Medical Biochemistry (5QH)
- HBMS 505 Topics in Physiology (5QH)
- HBMS 506 Physiological Basis of Medicine (8QH)
- HBMS 507 Medical Neuroscience (6QH)

*Students select one of the following certificate tracks as part of the Biomedical Sciences degree requirements:*

**Health Administration (12QH)**

- HBHX 514 Evidence-Based Management (3QH)
- HBHX 516 Current Topics in Healthcare (3QH)
- HBHX 517 Organizational Behavior and Human Resources (3QH)
- HBHX 518 Strategic Planning and Leadership in Healthcare (3QH)
Population Health Strategies (13QH)

HBPX 509 Risk and Quality Management in Healthcare (3QH)
HBPX 530 Statistics for Health Professions (4QH)
HBPX 540 Essentials of Population Health (3QH)
HBPX 541 Community Health Assessment and Intervention (3QH)

Assessment for Student Learning

Grading System

A 4.00 High Achievement
B 3.00 Above Average Achievement
C 2.00 Average Achievement
F 0.00 Failure

Grades without Associated Grade Points:
P Pass
F Fail

Assessment Methods

Course-level assessment includes unit exams, written assignments, class participation and presentations.

Graduation Requirements

Students must meet the following program requirements:

- Successful completion (C or better) of 45 or 46 quarter hours of core and track coursework
  - A 3.0 grade-point average (GPA) on a 4.0 scale is required to be considered for the certificate track coursework
- Successful completion of all course requirements within two years from the date of matriculation
- A minimum grade-point average (GPA) of 2.0 on a 4.0 scale in all courses in the program curriculum

Clinical and Lifestyle Nutrition (MS)

Program Introduction

The online Master of Science in Clinical and Lifestyle Nutrition prepares students to further their practice in the field of clinical nutrition using evidence-based nutrition knowledge and professional skills in critical thinking, leadership and communication. The program is designed for dietetic and healthcare professionals who want to offer an advanced level of care to patients and seek professional growth. Students individualize their program of study by completing projects on clinical nutrition topics of personal and professional interest.
Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** Bachelor’s degree in nutrition, dietetics or a related field from a regionally-accredited college or university.
- **Clinical experience:** Clinical experience in medical-surgical or critical care nutrition from healthcare professional clinical training, such as a dietetic internship, or on-the-job experience.
- **Prerequisite Courses:** Successful completion of the following specific coursework recorded on the applicant’s official bachelor’s degree transcript with a grade of C or better (4 quarter hours):
  - Biology
  - Biochemistry
  - Chemistry with Lab
  - Organic Chemistry with Lab
  - Physiology
- **Work experience:** Work experience in nutrition, dietetics or a related health or science field is highly recommended.
- **Grade-Point Average (GPA):** Minimum cumulative grade-point average of 2.75 on a 4.0 point scale in the last two years of undergraduate study.
- **Official transcripts:** Official transcripts from each college, university or community college previously attended must be submitted as part of the online application process
  - Students who have studied outside the U.S. will need to have their transcripts evaluated for U.S. equivalency using a service such as World Education Services (www.wes.org) or Educational Credential Evaluators (www.ece.org).
- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
- **Letters of Recommendation:** One letter of recommendation is required, two preferred, from professionals and/or academicians who know the applicant well (i.e., pre-health
advisors/committees, professors or supervisors). Letter writers are encouraged to share their contact information. Letters must include a signature and be on official letterhead.

- **Current Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
- **Personal Statement:** A personal statement is not required.
- **Transfer Applicant Policy:** There is no separate transfer application for this program. All students submit an application through the normal process.
- **Non-Degree Applicant Policy:** Non-degree applicants may be admitted to take a limited number of courses with the permission of the department chair.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate
large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

A maximum of nine quarter hours of graduate credit that addresses the requirements outlined in the core competencies for this program may be accepted from other regionally accredited institutions. No credit will be given for prior learning experience or through proficiency examinations.

**Core Competencies**

Upon completion of the Master of Science in Clinical and Lifestyle Nutrition program, the student will:

- Apply knowledge of clinical nutrition across the spectrum of health and disease
- Educate diverse patients and members of the healthcare team about diet in relationship to health and disease
- Demonstrate the application of critical thinking and research to clinical nutrition inquiry
- Communicate effectively as a nutrition healthcare professional
- Demonstrate leadership in an interprofessional healthcare setting

**Program Degree Plan**

**Core Courses (39QH)**

- HNUT 504 Health and Information Literacy for Healthcare Professionals (3QH)
- HNUT 505 Communication Strategies, Methods and Techniques (3QH)
- HNUT 506 Health Education Teaching Experience (1QH)
- HNUT 511 Advanced Nutrition and Chronic Diseases (4QH)
- HNUT 513 Health and Wellness Coaching (3QH)
- HNUT 526 Evaluating Research and Health Recommendations (4 QH)
- HNUT 541 Prevention, Health Promotion and Wellness (3QH)
- HNUT 576 Nutrition and Human Physical Performance (3QH)
- HNUT 596 Portfolio Evaluation (2QH)
- HNUX 518 Strategic Planning and Leadership (3QH)
- HNUX 530 Statistics for Health Professions (4QH)
HNUX 593 Chronic Preventable Disease and Introduction to Lifestyle Medicine (3QH)
HNUX 696 Culinary Medicine (3QH)

Electives (6QH)

Assessment for Student Learning

Grading System

A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P  Pass
F  Fail

Assessment Methods

Online student learning is assessed using both formative and summative assessments. Formative assessments include discussion activities, written assignments, written reflections and quizzes. Summative assessments include written papers, projects, presentations, exams, a final written portfolio and final portfolio presentation to a faculty audience.

Graduation Requirements

Students must meet the following program requirements:

- Satisfactory completion of 45 quarter hours of core program courses and elective requirements
- Meet core program competencies as demonstrated by successful completion of portfolio projects in core program courses and in the final Portfolio Evaluation course
- Successful completion of all course requirements within five years from the date of matriculation
- A cumulative grade-point average (GPA) of 3.0 on a 4.0 scale for the program

Health Administration (MS)

Program Introduction

The Master of Science degree in Health Administration (HA) is 46 quarter hours of credit offered in the online delivery format. Degree requirements can be completed in one year as a full-time student or in two years if enrolled part-time. The program prepares students to become future leaders in the healthcare industry. Students learn interprofessional administration skills; the clinical inquiry process; research, business and leadership expertise in a healthcare setting; and about the development of leadership skills and the ability to engage in self-directed, lifelong learning. Students complete the degree program with a capstone course that includes a final
portfolio and online presentation of major projects completed throughout their master’s degree program.

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** Bachelor’s degree from an accredited university or college in any discipline.
- **Grade-Point Average (GPA):** Cumulative minimum grade-point average (GPA) of 2.75 on a 4.0 scale.
- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be from a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
- Work experience in a related health or science field is recommended but not required.
- Students currently enrolled in other programs at Rosalind Franklin University of Medicine and Science should complete an alternative concurrent/short application form that can be accessed via InSite.
- **Letters of Recommendation:** Minimum of two letter of recommendation. A letter from an academician is preferred. For dual degree students, a letter of recommendation from Dean or Director of program is required instead.
- **Personal Statement:** Personal statement addressing professional goals as they apply to earning a degree in Health Administration.
- **Prerequisite Courses:** There are no required prerequisite courses.
- **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
- **Supplemental Application:** This program does not have a supplemental application.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.
- **Early Decision Programs**: This program does not accept early decision applicants.

The Health Administration program uses a rolling admissions process where applications are reviewed, decisions are made and students are enrolled every quarter. Applicants should submit all materials by the deadline prior to the quarter in which they wish to matriculate.

To apply, interested individuals must submit all required application items through the Health Administration Management and Policy Central Application Service (HAMPCAS).

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation**: The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication**: The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities**: The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.
Behavioral and Social Attributes: The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

Transfer Credits and Advanced Standing

The Health Administration Master of Science program will accept up to 9 quarter hours of credits earned from an external institution. An admitted student may request transfer credit by meeting the following conditions.

The student must:

- Demonstrate that course (s) meets and/or contains equivalent core learning competencies for the requested transfer. This must be shown through a course syllabus and/or other official course material.
- Have earned the credit from a regionally accredited college or university at the graduate level.
- Have earned a final course grade of B or better for the course requesting to transfer. (RFU will accept a Pass grade if the course is graded only on a pass-fail basis.)
- Have earned credits in an RFUMS graduate certificate program which may also be considered for transfer as core or elective credits (for Internal RFUMS transfer credits, the total number may exceed 9 credit hours).

Internal or external courses for transfer (9 QH) credits must be equivalent to the courses for which they are deemed as satisfying in the master’s degree requirements.

Core Competencies

Upon completion of the Master of Science in Health Administration program, students will be able to:

- Apply knowledge of Health Administration
- Apply leadership and communication skills in Health Administration
- Demonstrate critical inquiry and research skills in Health Administration
- Apply business knowledge to the healthcare environment to serve their professional affiliations
- Illustrate their knowledge of the healthcare environment
Program Degree Plan

Core Courses (40QH)
HHCM 507 Healthcare Informatics (3QH)
HHCM 508 Marketing Healthcare (4QH)
HHCM 515 Healthcare Law (3QH)
HHCM 516 Risk and Quality Management in Healthcare (3QH)
HHCM 517 Management Ethics (3QH)
HHCM 521 Evidence-Based Management (3QH)
HHCM 522 Healthcare Policy and Delivery Systems (4QH)
HHCM 524 Organizational Behavior and Human Resources (3QH)
HHCM 525 Strategic Planning and Leadership in Healthcare (3QH)
HHCM 551 Accounting and Financial Management in Healthcare (4QH)
HHCM 590 Final Portfolio (3QH)
HHCX 530 Statistics for Health Professions (4QH)

Electives (6QH)

Assessment for Student Learning

Grading System
A 4.00 High Achievement
B 3.00 Above Average Achievement
C 2.00 Average Achievement
F 0.00 Failure

 Grades without Associated Grade Points:
P  Pass
F  Fail

Assessment Methods
Assessment of student learning occurs through course exams, discussion board postings, projects, reflection papers and the final e-portfolio for the course.

Graduation Requirements
Students must meet the following graduation requirements:

- Successful completion of a minimum of 46 quarter hours
  - 37 quarter hours of core courses
  - 6 quarter hours of elective courses
  - 3 quarter hours for the final portfolio course
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
• Successful completion of all course requirements within five years from the date of matriculation

Health Professions Education (MS)

Program Introduction

The College of Health Professions offers a Master of Science (MS) in Health Professions Education for healthcare practitioners or clinicians who are already working with students and wish to acquire practical skills necessary for educating the next generation of healthcare practitioners.

This online program is designed for self-motivated healthcare practitioners and concurrently enrolled health professions students in any area of health care. Students will obtain skills in the areas of educational leadership, curriculum design, course design and assessment and program evaluation. Students can complete the requirements for the MS degree in typically less than two years (seven quarters) on a regular schedule of two courses per quarter, or up to four years (14-15 quarters) on a limited schedule of one course per quarter. The program prepares students to teach and manage education initiatives in an academic or corporate setting.

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

• **Prior Degree:** Bachelor’s degree in the biological sciences or healthcare profession from a regionally accredited college or university.

• **Prerequisite Courses:** No prerequisite courses required.

• **Grade-Point Average (GPA):** Minimum cumulative grade-point average (GPA) of 2.5 on a 4.0 scale.

• **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
• **Letters of Recommendation:** One letter of recommendation is required, two are preferred from professionals and/or academicians who know the applicant well.

• **Work Experience:** U.S. or Canadian employment as a healthcare provider, clinician or currently enrolled health professional student is required. Certification, registration or licensure as a health professional is highly recommended.

• **Non-Degree Applicant Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.

• **Personal Statement:** May be required.

• **Transfer Applicant and Advanced Standing Policy:** See the Transfer Credits and Advanced Standing Policy in the section that follows.

• **Resume or Curriculum Vitae:** A resume or curriculum vitae (CV) is required. Work experience as an educator in a related health or science field is preferred and strongly recommended but not required. If you have experience in these areas, please detail it on your resume or CV.

• **Supplemental Application:** This program does not have a supplemental application.

• **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.
• **Communication:** The candidate must be able to communicate effectively, efficiently, and appropriately with faculty, staff, fellow students and research subjects in both verbal and recorded format (writing, typing, graphics or telecommunication).

• **Motor:** The candidate must be able to participate in lengthy written discussions and compose lengthy written assignments and projects. For any required research the candidate needs to be able to carry out and report on a research project. Working in an online course environment requires that the candidate be able to remain at the computer for prolonged intervals.

• **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

• **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

The faculty in the Master of Science Health Professions Education program may review requests for transfer credit from other institutions on a case-by-case basis. The program will accept up to 9 quarter hours of credits earned from a fully accredited external institution or another program within RFUMS.

An admitted student may request transfer credit by meeting the following conditions.

• For required core courses or elective courses, students must earn credit at the graduate level from a regionally accredited college or university. The student must submit to the HPE Program Director a full syllabus and official transcript for courses to demonstrate the course(s) meets and/or contains equivalent core learning competencies for the requested transfer.

• Credits earned in an RFUMS graduate program may also be considered for transfer as elective credits. The student must submit to the HPE Program Director a full syllabus and official transcript for courses to demonstrate the course(s) meets and/or contains equivalent core learning competencies for the requested transfer.
• Student must provide evidence of an earned final course grade of “B” or better for the course the student is requesting to transfer. (RFU will accept a Pass grade if the course is graded only on a pass-fail basis.)

Core Competencies
Upon completion of the Master of Science in Health Professions Education program the student will:

• Integrate learning style information and material presentation methods to facilitate student learning of health professions subject matter
• Design curricula based on assessment of student learning needs and professional accreditation requirements
• Evaluate information regarding student performance and program outcomes assessment
• Integrate educational leadership and evidence-based education principles to become a leader in the health professions educational environment

Program Degree Plan
Core Courses (32QH)
HHPE 510 Learning Theories (3QH)
HHPE 512 Instructional Presentations Skills (3QH)
HHPE 530 Curriculum Design (3QH)
HHPE 535 Instructional Design for Health Professions Education (4QH)
HHPE 540 Classroom Assessment (4QH)
HHPE 560 Managing Change in Educational Organizations (3QH)
HHPE 580 Research in Education (3QH)
HHPE 620 Program Evaluation and Accreditation (3QH)
HHPE 680 Teaching Practicum (3QH)
HHPE 685 Portfolio Presentation (3QH)

Electives (15QH)

Assessment for Student Learning
Grading System
A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:
P  Pass
F  Fail
Assessment Methods

Students enrolled in the Master of Science in Health Professions Education degree program are evaluated using multi-faceted assessments that include but are not limited to written papers, discussions, group projects, case studies, poster presentations, course design projects, online exams and research assignments. Capstone projects, which include a teaching portfolio and a teaching practicum, are used to assess student learning at the completion of the program coursework.

Graduation Requirements

Students must meet the following program requirements:

- Successful completion of a minimum of 47 quarter hours as required for the degree
- Successful completion of all course requirements within five years from the date of matriculation
- Successful completion of a master’s portfolio and teaching practicum
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum

Lifestyle Medicine (MS)

Program Introduction

The online Master of Science in Lifestyle Medicine degree prepares the medical professionals to advance and provide the fundamentals of Lifestyle Medicine. Health care practitioners improve the health of individuals, families and communities. With this degree, graduates are prepared to promote Lifestyle Medicine as the first treatment options for their patients as opposed to treating non-communicable disease with expensive and ever-increasing quantities of medications or expensive procedures. The six pillars of Lifestyle Medicine will be the focus of the degree program, which include: Nutrition; Exercise; Sleep; Stress resiliency; Addiction; and Social connection. In additions, self-care of the health care practitioner will continually be emphasized. Students will individualize their program of study by completing selected electives and completing a practicum project on Lifestyle Medicine topics of personal and professional interest.

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior degree**: Bachelor's degree from a regionally accredited college or university. Competitive applicants will have earned an MD, DO, DPM, DNP, or other graduate degree if holding APRN license.
- **Prerequisite Courses**: A minimum of two courses in the life/physical sciences and one course in the social sciences recorded on the applicant’s official transcript with a grade of “C” or better.
• **Grade-Point Average (GPA):** Cumulative minimum grade point average of 2.75 on a 4.0 point scale in the last two years of study.

• **Transcripts:** Please submit a transcript for your bachelor's degree. Also, if applicable, please submit a transcript for your professional degree (MD, DO, DPM, DNP, or other graduate degree if holding APRN license) to RFUCAS. Only official transcripts with degree conferral will be accepted.
  - Students who have studied outside the U.S. will need to have their transcripts evaluated for U.S. equivalency using a service such as World Education Services (www.wes.org) or Educational Credential Evaluators (www.ece.org).

• **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.

• **Letters of Recommendation:** One letter of recommendation is required, two preferred, from professionals and/or academicians who know you well (i.e. pre-health advisors/committees, professors or supervisors). We encourage letter writers to share their contact information. Letters must include a signature and be on official letterhead. Letters must be submitted through RFUCAS.

• **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.

• **Personal Statement:** A personal statement is not required.

• **Transfer Applicant Policy:** There is no separate transfer application for this program. All students submit an application through the normal process.

• **Non-Degree Applicant Policy:** Non-degree applicants may be admitted to take a limited number of courses with the permission of the department chair.

• **Supplemental Application:** This program does not have a supplemental application.

• **Early Decision Program:** This program does not accept early decision applicants.

### Technical Standards

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.
- **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.
Transfer Credits and Advanced Standing
No transfer credits will be accepted for this program.

Core Competencies
Upon completion of the Master of Science in Health Promotion and Wellness program, the student will:

- **Leadership**: Promote healthy behaviors as foundational to medical care, disease prevention and health promotion. Create school, work and home environments that support healthy behaviors.
- **Knowledge**: Demonstrate knowledge of the evidence that specific lifestyle changes have positive effects on health outcomes. Describe ways healthcare providers engage with patients and families to have a positive effect on health behaviors.
- **Assessment Skills**: Assess the social, psychological and biological predispositions of patients’ behaviors and resulting health outcomes. Assess readiness, willingness, and ability to make health behavior changes.
- **Management Skills**: Use nationally recognized guidelines to assist patients in self-managing their health behaviors and lifestyles. Establish relationships to effect and sustain behavioral change using evidence-based methods and tools. Help patients manage and sustain healthy lifestyle practices and refer to other healthcare professionals as needed.
- **Office and Community Support**: Practice as an interprofessional team and support the team approach. Develop and apply practices to support lifestyle medicine care. Measure processes and outcomes to improve lifestyle interventions. Use appropriate community resources that support healthy lifestyles.

Program Degree Plan

**Core Courses (39QH)**
- HLSM 500 Chronic Preventable Disease and Introduction to Lifestyle Medicine (3QH)
- HLSM 501 Strategies to Manage Mental and Emotional Health and Avoiding Risky Substances (3QH)
- HLSX 530 Statistics for Health Professions (4QH)
- HLSX 568 Information and Health Literacy for Health Professionals (3QH)
- HLSX 570 Modern Nutrition (3QH)
- HLSX 572 Health and Wellness Coaching (3QH)
- HLSX 576 Nutrition and Human Physical Performance (3QH)
- HLSX 583 Advanced Nutrition and Chronic Disease (4QH)
- HLSX 592 Research Design (4QH)
- HLSM 600 Concepts of Population Health and Personal Health (3QH)
- HLSM 690 Independent Study-Practicum Project (6QH)

**Electives (6QH)**
Assessment for Student Learning

Grading System

A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P  Pass
F  Fail

Assessment Methods

Online student learning is assessed using both formative and summative assessments. Formative assessments include discussion activities, written assignments, written reflections and quizzes. Summative assessments include written papers, projects, presentations, exams, successful implementation of a community health project, a final written portfolio and final portfolio presentation to a faculty audience.

Graduation Requirements

Students must meet the following program requirements:

- Satisfactory completion of 45 quarter hours of core program courses and elective requirements
- Meet core program competencies as demonstrated by successful completion of portfolio projects in core program courses and in the final Portfolio Evaluation course
- Successful completion of all course requirements within five years from the date of matriculation
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program

Health Promotion and Wellness (MS)

Program Introduction

The online Master of Science in Health Promotion and Wellness degree prepares healthcare practitioners and fitness professionals to offer an enhanced level of services to improve the health of individuals, families and communities. With this degree, graduates are prepared to teach people to lead healthy lifestyles, work with organizations to develop wellness plans to keep employees healthy and decrease healthcare costs, and help people with lifestyle related chronic illnesses to improve their quality of life and reduce disability. Students individualize their program of study by completing projects on health promotion and wellness topics of personal and professional interest.
Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior degree:** Bachelor’s degree from a regionally-accredited college or university.
- **Prerequisite Courses:** A minimum of two courses in the life/physical sciences and one course in the social sciences recorded on the applicant’s official bachelor’s degree transcript with a grade of C or better.
  - Alternatives to coursework requirements may include relevant academic work or professional work experiences with preference for candidates with coursework in the life/physical sciences.
- Professional experience in health promotion and wellness is desirable.
- **Grade-Point Average (GPA):** Minimum cumulative grade-point average of 2.75 on 4.0 point scale in the last two years of undergraduate study.
- **Transcripts:** Official transcripts from each college, university or community college previously attended must be submitted as part of the online application process.
  - Students who have studied outside the U.S. will need to have their transcripts evaluated for U.S. equivalency using a service such as World Education Services (www.wes.org) or Educational Credential Evaluators (www.ece.org).
- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
- **Letters of Recommendation:** One letter of recommendation is required, two preferred, from professionals and/or academicians who know the applicant well (i.e., pre-health advisors/committees, professors or supervisors). Letter writers are encouraged to share their contact information. Letters must include a signature and be on official letterhead.
- **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
- **Personal Statement:** A personal statement is not required.
• **Transfer Applicant Policy:** There is no separate transfer application for this program. All students submit an application through the normal process.

• **Non-Degree Applicant Policy:** Non-degree applicants may be admitted to take a limited number of courses with the permission of the department chair.

• **Supplemental Application:** This program does not have a supplemental application.

• **Early Decision Program:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

• **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

• **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.
• **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

A maximum of nine quarter hours of graduate credit that addresses the requirements outlined in the core competencies for this program may be accepted from other regionally accredited institutions. No credit will be given for prior learning experience or through proficiency examinations.

**Core Competencies**

Upon completion of the Master of Science in Health Promotion and Wellness program, the student will:

- Apply health promotion and wellness knowledge to professional activities
- Educate the individual, family and community about nutrition and health promotion
- Demonstrate the ability to think critically and evaluate research to create wellness initiatives
- Communicate effectively as a health professional
- Demonstrate leadership in an interprofessional health and wellness environment

**Program Degree Plan**

**Core Courses (42QH)**

HPHW 583 Independent Study in Health Promotion and Wellness (4QH)  
HPHW 596 Portfolio Evaluation for Health Promotion and Wellness (3QH)  
HPHX 510 Management Ethics (3QH)  
HPHX 514 Evidence-Based Management (3QH)  
HPHX 515 Healthcare Policy and Delivery Systems (4QH)  
HPHX 530 Statistics for Health Professions (4QH)  
HPHX 540 Essentials of Population Health (3QH)  
HPHX 568 Information and Health Literacy for Healthcare Professionals (3QH)  
HPHX 569 Communication Strategies, Methods and Techniques (3QH)  
HPHX 570 Modern Nutrition (3QH)  
HPHX 571 Leadership (3QH)
HPHX 573 Instructional Design for Health Education (3QH)
HPHX 574 Prevention, Health Promotion and Wellness (3QH)

Elective (3QH)

Assessment for Student Learning

Grading System

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

High Achievement
Above Average Achievement
Average Achievement
Failure

Grades without Associated Grade Points:

P    Pass
F    Fail

Assessment Methods

Online student learning is assessed using both formative and summative assessments. Formative assessments include discussion activities, written assignments, written reflections and quizzes. Summative assessments include written papers, projects, presentations, exams, successful implementation of a community health project, a final written portfolio and final portfolio presentation to a faculty audience.

Graduation Requirements

Students must meet the following program requirements:

- Satisfactory completion of 45 quarter hours of core program courses and elective requirements
- Meet core program competencies as demonstrated by successful completion of portfolio projects in core program courses and in the final Portfolio Evaluation course
- Successful completion of all course requirements within five years from the date of matriculation
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program

Nutrition Education (MS)

Program Introduction

The online Master of Science in Nutrition Education degree prepares students in the fields of nutrition and dietetics who want to expand their commitment to nutrition education initiatives designed to impact the health and well-being of individuals, families and diverse communities. The program balances the science of nutrition with solid teaching and communication practices and prepares graduates to lead efforts in healthcare, the community, and in the food and wellness
industries. Students individualize their program of study by completing projects on nutrition education topics of personal and professional interest.

**Admission Requirements**

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** Bachelor’s degree in nutrition, dietetics or a related field from a regionally-accredited college or university.

- **Prerequisite Courses:** Successful completion of the following specific coursework recorded on the applicant’s official bachelor’s degree transcript with a grade of C or better (4 quarter hours):
  - Biology
  - Biochemistry
  - Chemistry with Lab
  - Organic Chemistry with Lab
  - Physiology

- For applicants with the requisite science background but without a degree in nutrition or dietetics, the following nutrition courses are required: human nutrition, lifecycle nutrition and clinical nutrition.

- Work experience in nutrition, dietetics or a related health or science field is highly recommended.

- **Grade-Point Average (GPA):** Minimum cumulative grade-point average of 2.75 on a 4.0 point scale in the last two years of undergraduate study.

- Official transcripts from each college, university or community college previously attended must be submitted as part of the online application process.
  - Students who have studied outside the U.S. will need to have their transcripts evaluated for U.S. equivalency using a service such as World Education Services (www.wes.org) or Educational Credential Evaluators (www.ece.org)

- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or
university for at least two consecutive years, or if the applicant is from a
country in which English is a primary language.

- **Letters of Recommendation:** One letter of recommendation is required, two preferred, from professionals and/or academicians who know the applicant well (i.e., pre-health advisors/committees, professors or supervisors). Letter writers are encouraged to share their contact information. Letters must include a signature and be on official letterhead.

- **Current Resume or Curriculum Vitae:** A resume or curriculum vitae is required.

- **Personal Statement:** A personal statement is not required.

- **Transfer Applicant Policy:** There is no separate transfer application for this program. All students submit an application through the normal process.

- **Non-Degree Applicant Policy:** Non-degree applicants may be admitted to take a limited number of courses with the permission of the department chair.

### Technical Standards

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual
material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

A maximum of nine quarter hours of graduate credit that addresses the requirements outlined in the core competencies for this program may be accepted from other regionally accredited institutions. No credit will be given for prior learning experience or through proficiency examinations.

**Core Competencies**

Upon completion of the Master of Science in Nutrition Education program, the student will:

- Apply nutrition and health promotion knowledge to professional activities
- Educate diverse individuals, families and communities about nutrition and wellness
- Demonstrate the application of critical thinking and research to nutrition education activities
- Communicate effectively as a nutrition educator
- Demonstrate leadership in an interprofessional nutrition and wellness environment

**Program Degree Plan**

**Core Courses (40QH)**

- HNUT 504 Health and Information Literacy for Healthcare Professionals (3QH)
- HNUT 505 Communication Strategies, Methods and Techniques (3QH)
- HNUT 506 Health Education Teaching Experience (1QH)
- HNUT 511 Advanced Nutrition and Chronic Diseases (4QH)
- HNUT 513 Health and Wellness Coaching (3QH)
- HNUT 526 Evaluating Research and Health Recommendations (4QH)
- HNUT 541 Prevention, Health Promotion and Wellness (3QH)
- HNUT 596 Portfolio Evaluation (2QH)
- HNUX 500 Instructional Design for Health Professions Education (4QH)
HNUX 518 Strategic Planning and Leadership (3QH)
HNUX 526 Learning Theories (3QH)
HNUX 527 Instructional Presentation Skills (3QH)
HNUX 530 Statistics for Health Professions (4QH)

Electives (6QH)

Assessment for Student Learning
Grading System

A 4.00 High Achievement
B 3.00 Above Average Achievement
C 2.00 Average Achievement
F 0.00 Failure

Grades without Associated Grade Points:
P Pass
F Fail

Assessment Methods
Online student learning is assessed using both formative and summative assessments. Formative assessments include discussion activities, written assignments, written reflections and quizzes. Summative assessments include written papers, projects, presentations, exams, a final written portfolio and final portfolio presentation to a faculty audience.

Graduation Requirements
Students must meet the following program requirements:

- Satisfactory completion of 46 quarter hours of core program courses and elective requirements
- Meet core program competencies as demonstrated by successful completion of portfolio projects in core program courses and in the final Portfolio Evaluation course
- Successful completion of all course requirements within five years from the date of matriculation
- A cumulative grade-point average (GPA) of 3.0 on a 4.0 scale for the program

Pathologists’ Assistant Program (MS)
Mission
The mission of the Pathologists’ Assistant Department is to prepare and develop individuals for the professional practice of surgical and autopsy pathology in a continually evolving healthcare environment.
Vision
The Pathologists’ Assistant Department will be recognized as the leader in providing graduate-level training in Pathologists’ Assistant studies through its outstanding graduates, curricular innovation, scholarly activity, community service, and the leadership it provides to the pathologists’ assistant community worldwide.

Philosophy Statement
The Pathologists’ Assistant Department ensures a level of professional training, both academic and clinical, that prepares its graduates to serve as stewards of the profession and empowers them to set forth and provide exceptional care and leadership for the profession as well as educate future generations of healthcare providers in the art and science of practicing anatomic pathology.

The Pathologists’ Assistant Department asserts that there is an inherent dignity in surgical specimens that represent a unique human being, and that the utmost care and skill will be provided in transmitting the information contained within to pathologists, surgeons and other members of the healthcare team. As such, the same professional care will be delivered to our patients in the autopsy service who have come to teach the living from their individual lives and deaths.

Program Introduction
A pathologists’ assistant is an intensively trained allied health professional who provides anatomic pathology services under the direction and supervision of a pathologist. Pathologists’ assistants interact with pathologists in the same manner that physician assistants carry out their duties under the direction of physicians in surgical and medical practice. Pathologists’ assistants contribute to the overall efficiency of the laboratory or pathology practice in a cost-effective manner by performing a variety of tasks, consisting primarily of gross examination of surgical pathology specimens and performance of autopsies.

The Pathologists’ Assistant program is a rigorous, full-time program. A typical program of study as outlined below consists of 12 months of didactic coursework followed by 10 months of clinical rotations through our nationally known clinical affiliates.

Program Accreditation
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
5600 N. River Road, Suite 720
Rosemont, IL 60018-5119
773-714-8880
www.naacls.org

Admission Requirements
Admission to the program is competitive. In addition to the university’s minimum requirements, applicants must meet the following program requirements:
- **Prior Degree:** Applicants are required to have a bachelor’s degree from an accredited institution of higher education prior to matriculation into the program.

- **Grade-Point Average (GPA):** A minimum overall and science grade-point average (GPA) of 2.75 on a 4.0 scale is required prior to matriculation to the program. Preference is given to students with a cumulative grade-point average (GPA) of 3.0 or higher on a 4.0 scale.

- Basic computer skills including the ability to use email, the internet, word processing and the ability to create presentations and/or use and create spreadsheets.

- **Tests:** Proficiency in written and verbal English is required.
  - The Test of English as a Foreign Language (TOEFL) examination is required of all foreign applicants from countries in which English is not the native language and who have not attended an American college or university for two consecutive years. It is the applicant’s responsibility to provide an official report of the TOEFL.

- A criminal background check will be performed on admitted students.

- **Transcripts:** Official transcripts from each college, university and community college previously or currently attended are required. Applicants who have studied outside of the U.S. will need to have their transcripts evaluated for U.S. equivalency using a service such as www.wes.org or www.ece.org

- **Letters of Recommendation:** Two letters of recommendation from former professors, employers or those who are familiar with the applicant’s professional or educational capabilities are required. It is recommended that letters of recommendation are dated within 1-2 years of the application submission date.

- **Narrative Statements:** Five photos with accompanying narrative statements are required. Each narrative statement must be a minimum of 250 words. One of the five narratives must discuss your understanding of, and exposure to, the pathologists’ assistant profession, as well as why you want to be a pathologists’ assistant.

- **Experience:** Applicants must have a strong understanding of the profession and exposure to surgical pathology is required. A minimum of 8 hours of surgical pathology exposure is recommended. To be a competitive applicant, additional exposure hours are encouraged, and should be obtained within two years of your application. Exposure to autopsy pathology is recommended, but not required.

- **Prerequisites:**
  - A minimum of 3 semester or 4 quarter credit hours in each of the following subjects:
    - Biological Science (Human Anatomy and/or Physiology recommended)
    - Microbiology
    - General Chemistry
    - Organic Chemistry and/or Biochemistry
    - College-level Mathematics (Statistics recommended)
    - English Composition (English Composition I or II and/or Rhetoric recommended)
Applicants are required to have completed the necessary prerequisites for matriculation within 10 years of their application submission date. Each prerequisite course needs to meet the minimum credit hours noted above, receive a final grade of C or better and must be taken at an accredited institution of higher education prior to matriculation into the program.

- **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
- **Supplemental Application:** There is no supplemental application.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** This program does not accept non-degree applicants.
- **Early Decision Programs:** This program does not accept early decision applicants.

### Technical Standards

Candidates for entry into the Pathologists’ Assistant program must possess certain abilities and skills to function effectively and meet the safety and technical requirements in a broad variety of classroom, laboratory and clinical settings with or without accommodation.

Candidates will be reviewed individually. The Admissions Committee requests that each candidate assesses the required qualities and understands the school’s expectations.

- **Observation:** Candidates must be able to observe close-up and at a distance. In a clinical situation, visual skills are necessary to observe microscopic studies and tissues in normal and pathological states. Observation is important in order to elicit information and describe changes from the “normal.” Such observation and information acquisition necessitates the functional use of visual, auditory and somatic sensation while being enhanced by the functional use of other sensory modalities.

- **Communication:** Communication encompasses speech, hearing and writing. A candidate must be able to speak, to hear and to observe by sight in order to elicit information, describe changes and perceive non-verbal communications. This would include facial changes, gesturing and posturing. The candidate must be able to communicate effectively and sensitively, in oral and written form, with faculty, fellow students, staff, patients and families, as well as all members of the healthcare team.

- **Motor:** It is required that candidates possess the motor skills necessary to directly perform basic laboratory tests and diagnostic procedures. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision. This requirement also includes but is not limited to the use of an electronic keyboard. The candidate must possess the motor skills necessary to perform postmortem examinations to include pro-section, selection and preparation of tissues for examination. They must be able to complete the autopsy protocol to include photography, coding of specimens and filing of reports. In association with the pathologist the candidate must possess the skills to dissect surgical specimens and prepare tissues for microscopic examination to include the preparation of frozen and permanent sections for light, electron and immuno-fluorescent microscopy. The candidate must also possess the motor skills necessary to operate specific instruments and perform special techniques as directed by the pathologist. Therefore, the candidate must...
be able to move freely and safely about a laboratory and reach benchtops or shelves. The student must be able to travel to clinical affiliate sites for practical experience. Furthermore, the student must perform moderately taxing continuous physical work, often requiring prolonged sitting or standing, over several hours.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate, synthesize and apply problem-solving and critical-thinking skills in a timely manner. In addition, the candidate must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. They must be able to apply the concepts and information they obtain.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. They need to exercise good judgment, self-control, prompt completion of patient/specimen assessment and provide accurate documentation of procedures. The candidate is expected to behave and develop relationships in a mature, sensitive and professional manner with patients, families and members of the healthcare team. They must be flexible, adapt to changing situations and deal with physically and mentally taxing workloads. They need to be able to obtain information, process it and prioritize activities effectively and collaboratively. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues to improve. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that will be assessed during the admissions and educational process.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator at 847-578-8354 or ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**
No transfer credits or advanced standing will be awarded regardless of previous experience.

**Core Competencies**
Upon completion of the 22-month master’s degree program for Pathologists’ Assistant, the student will:

- Recognize and respect the diversity of patients and fellow healthcare providers as well as acknowledge one’s responsibilities to patients’ families and the community at large.
- Effectively communicate and collaborate with other healthcare professionals in interprofessional teams.
- Engage in evidence-based practice within the anatomic pathology laboratory while making a conscious, continued effort to improve performance.
- Synthesize clinical information from various sources to present comprehensive, clinical pathologic correlations.
• Communicate complex anatomic pathology information effectively in written, verbal and photographic forms.
• Discern normal structure and function of organs, tissues and cells from pathologic changes as demonstrated by selecting appropriate techniques for collecting, handling, submitting and processing specimens.
• Embrace and actively participate in a systems approach to reducing error, ensuring safety and improving quality of care.
• Understand the value of information technology and promote its utilization in professional practice.
• Provide leadership in the laboratory through an understanding of management techniques and the operations and services provided in the anatomic pathology laboratory to facilitate efficiency and productivity.
• Conduct the practice of a Pathologists’ Assistant in a professional manner and, by doing so, act as a steward of the profession for students, colleagues and the public through education and research into the art and science of the practice of anatomic pathology.

Program Degree Plan

Year 1 (75.5QH)

HAPA 535 Medical Terminology (1QH)
HAPA 540 Autopsy Pathology (2QH)
HAPA 540A Autopsy Pathology Lab (2QH)
HAPA 550 Seminar I (2QH)
HAPA 551 Seminar II (2QH)
HAPA 552 Seminar III (2QH)
HAPA 553 Seminar IV (2QH)
HAPA 560 Clinical Correlations I (3QH)
HAPA 560A Clinical Correlations I Lab (2QH)
HAPA 561 Clinical Correlations II (3QH)
HAPA 561A Clinical Correlations II Lab (2QH)
HAPA 562 Clinical Correlations III (3QH)
HAPA 562A Clinical Correlations III Lab (2QH)
HAPA 563 Clinical Correlations IV (3QH)
HAPA 563A Clinical Correlations IV Lab (2QH)
HAPX 529 Foundations for Interprofessional Practice (2QH)
HAPX 532 Leadership in the Healthcare Environment (2QH)
HAPX 563 Clinical Anatomy (10QH)
HAPX 578 Structure and Function (11QH)
HAPX 579 Neuroscience (5QH)
HAPX 677 General and Systemic Pathology (12.5QH)

Year 2 (44QH)

HAPA 630 Anatomic Pathology Clerkship I (9QH)
HAPA 631 Anatomic Pathology Clerkship II (13QH)
HAPA 632 Anatomic Pathology Clerkship III (15QH)
HAPA 633 Anatomic Pathology Clerkship IV (7QH)

Assessment for Student Learning

Grading System

A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P    Pass
F    Fail

Assessment Methods

Students enrolled in the Master of Science in Pathologists’ Assistant program are evaluated using a variety of assessment methods for student learning. Didactic lecture and laboratory course assessment methods may include but are not limited to campus-based lectures, group activities, class discussions, quizzes, presentations, examinations, laboratory sessions, laboratory demonstrations, dictations and photography. Assessment methods for the clinical year of the program may include but are not limited to hands-on clinical training, readings, assignments, quizzes, examinations, portfolios, poster presentations and clinical evaluations.

Standards for Promotion

The Pathologists’ Assistant Department utilizes the grading system as established by University in their Academic Catalog. Students are required to earn a minimum grade of a “C” or “P” in all courses of the curriculum, including both the didactic and clinical year. A student failing to meet these minimal standards may become subject to dismissal in accordance with University policy. Continuance into the clinical year and assignment to a clinical site is guaranteed to students who have fulfilled all requisite criteria to complete the didactic year.

If a student is removed from a clinical site during their clinical experience for any reason, the student will receive a grade of “F” for that quarter which will result in a subject to dismissal hearing.

Graduation Requirements

Pathologists’ Assistant students are required to successfully complete the didactic and clinical curriculum, totaling 119.5 quarter hours, with a cumulative grade-point average of a 2.0 (C) or better on a 4.0 scale. Upon successful completion of the program, students will then be eligible for graduation and to take the American Society for Clinical Pathology’s certification exam.
Students must complete graduation requirements within five years from the date of matriculation.

**Physician Assistant Practice (MS)**

**Mission**

Educate and prepare competent, compassionate and ethical Physician Assistant leaders who, as integral members of the interprofessional healthcare team, will provide quality patient-centered care to a diverse population.

**Vision**

To be recognized nationally as a leader in the Physician Assistant profession through our outstanding graduates, curricular innovations, scholarly activities and service to the community.

**Program Introduction**

“PAs are health professionals licensed or, in the case of those employed by the federal government, credentialed to practice medicine in collaboration with physicians. PAs are qualified by graduation from an accredited PA educational program and/or certification by the National Commission on Certification of Physician Assistants. Within the physician-PA relationship, PAs provide patient-centered medical care services as a member of a healthcare team. PAs practice with defined levels of autonomy and exercise independent medical decision making within their scope of practice.” – American Academy of Physician Assistants (AAPA) House of Delegates, 2014

RFUMS offers a 24-month, entry-level graduate program leading to a Master of Science in Physician Assistant Practice. The first 12 months consist of didactic coursework. The second 12 months are comprised of required core clinical rotations.

The development of research and scholarship competencies occurs throughout the program’s two years and culminates in a Master’s Project that can be either experiential or literature-based.

**Program Accreditation**

Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)
12000 Findley Road
Suite 275
Johns Creek, GA 30097
770-476-1224

**Admission Requirements**

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Transcripts:** All undergraduate and any graduate work must be submitted as part of the admissions application.
• **Prior Degree:** A bachelor’s degree from an accredited college or university OR current enrollment in the DePaul University Pathway Program.

• **Grade-Point Average (GPA):** Minimum overall and science grade-point average (GPA) of 2.75 on a 4.0 scale.

• **Tests:**
  - Those who have studied at a foreign educational program need to provide an official evaluation of course equivalence report using a service such as World Education Services at www.wes.org or Education Credential Evaluators at www.ece.org

• **Letters of Recommendation:** Two to three letters of recommendation. One letter should address the applicant’s scholastic aptitude, and one should be from a healthcare professional that has worked with the applicant.

• **Previous direct patient-care related medical experience and/or shadowing of a Physician Assistant.** Coming into the program, successful applicants typically have at least 800 hours of direct patient contact.

• **Personal Statement:** A personal statement is required.

• **Prerequisite Courses:** Each of the following prerequisite courses must be completed at an accredited institution of higher education within the last 10 years (5 years preferred) and with a grade of C or higher:
  - Biochemistry
  - Human Anatomy
  - Human Physiology
  - Introduction to Psychology
  - Microbiology (with lab preferred)

• **Resume or Curriculum Vitae:** A resume or curriculum vitae is not required.

• **Supplemental Application:** This program does not have a supplemental application.

• **Transfer Applicant Policy:** This program does not accept transfer applicants.

• **Non-Degree Applicant Policy:** This program does not accept non-degree applicants.

• **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

Candidates for admission, participation in aspects of training, completion of course of study, and graduation must possess essential skills, abilities, and characteristics. These essential requirements include minimum physical and cognitive abilities, and sufficient mental and emotional stability. Candidates are required to perform satisfactorily throughout the entire curriculum and must meet all requirements for graduation. For the purposes of this document, the term “candidates” means candidates for admission to the program as well as Rosalind Franklin University of Medicine and Science Physician Assistant (PA) students who are candidates for retention, promotion, or graduation.

It is the societal responsibility of the PA Program to train competent healthcare providers who are able to demonstrate extensive knowledge, technical skills, and critical thinking. The PA Program intends for graduates to become competent generalists. The categories described below
address these concepts and are referred to as technical standards required to achieve these expectations, satisfactorily progress through the program, and graduate. These categories include: observation, communication, motor function, intellectual-conceptual (integrative and quantitative) abilities, and behavioral and social attributes. Candidates who have questions regarding these technical standards, or who may need to request reasonable accommodation(s) to meet these technical standards are encouraged to contact the ADA Coordinator (information detailed below).

- **Observation**: Candidates must acquire a defined level of information presented in the form of demonstrations and experiences. Examples may include: dissection of cadavers, examination of specimens during anatomy, and simulated patient encounters. Utilizing skills obtained throughout the curriculum, candidates must also acquire information from a patient through a complete physical examination.

- **Communication**: Candidates must communicate effectively, efficiently, and sensitively with patients and families, as well as faculty, staff, peers, and other healthcare providers. Candidates must be able to obtain a medical history; describe changes in mood, behavior, posture, and activity; interpret non-verbal aspects of communication; document and relay information clearly and accurately; develop therapeutic rapport with patients.

- **Motor Function**: Candidates must be able to perform a complete physical exam and basic clinical procedures, following appropriate training by the PA program. Additionally, candidates must also be able to respond promptly to general and emergent clinical situations.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities**: Candidates must be able to acquire information through a variety of modalities including, but not limited to: classroom instruction; small group, team, and collaborative activities; individual study; preparation and presentation of reports; simulations; and use of computer technology. Candidates must also be able to comprehend three-dimensional relationships and understand the spatial relationships of structures. Candidates must measure, calculate, reason, analyze, integrate, and synthesize. Additionally, they must have the ability to formulate and test hypotheses that enable effective and timely problem-solving in diagnosis treatment of patients in a variety of clinical settings and healthcare systems.

- **Behavioral and Social Attributes**: Candidates must possess the maturity and emotional health required for: full utilization of intellectual abilities; the use of good judgment; the prompt completion of all responsibilities attendant to the curriculum and to the diagnosis and care of patients; and the development of mature, sensitive and effective relationships with patients, families, other healthcare providers, faculty, staff, and peers. They must display characteristics of integrity, honesty, conscientiousness, and empathy. Additionally, candidates must be able to collaborate, accept and provide appropriate and constructive feedback, and take personal responsibility for making appropriate and positive changes. Candidates must have the physical and emotional stamina and resilience to tolerate taxing workloads and to function in a competent and professional
manner under highly stressful situations. They must be able to display flexibility and adapt to changing environments.

The PA Program at Rosalind Franklin University of Medicine and Science supports students who qualify for reasonable accommodations under the Americans with Disabilities Act (ADA). For further information related to these technical standards, or to request reasonable accommodations, interested persons are encouraged to contact the ADA Coordinator, at 847-578-8354 or by email at ada.coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credits or advanced standing will be awarded regardless of previous experience.

**Competencies of a Graduate PA**

At the completion of Physician Assistant training at Rosalind Franklin University, the graduate will be able to demonstrate the following competencies for clinical practice:

- The development of a fund of medical knowledge that includes the etiology, pathophysiology, signs and symptoms, and treatment of a wide variety of common illnesses, injuries, and disease states.
- The ability to perform a thorough history and physical exam that leads to the acquisition of data to support an accurate differential diagnosis.
- The understanding of how to order and interpret laboratory and imaging studies that will supplement the history and physical exam and improve diagnostic accuracy.
- The ability to effectively document and communicate medical information in oral, written and electronic formats to enhance communication between healthcare providers.
- The clinical decision-making skills needed to investigate, to detect abnormalities, to problem solve, and to create treatment plans that meet the individual needs of a diverse patient population.
- The establishment of communication skills and the ability to form interpersonal relationships with patients and their families that are based on honesty, trust, and patient-centered humanistic care.
- The professionalism expected of a trusted healthcare provider, and the practice of ethical and legal standards that demonstrate respect for the patient and society.
- The knowledge and skills necessary to care for people of all age groups, and with emergent, acute or chronic physical and mental health conditions in a variety of settings.
- The ability to initiate and recommend health promotion and disease prevention measures that will sustain the health of individuals and communities.
- The skills to provide patient education and counseling that enhances understanding and compliance with therapeutic regimens.
- The value of lifelong learning in the practice of medicine, and the desire to continue to utilize and apply principles of evidence-based practice.
- The ability to work in an interprofessional collaborative practice as a member of a healthcare team that appreciates the strengths of each contributor and uses those strengths in a synergistic way to deliver the best outcomes for the patient.

**Program Degree Plan**

**Year 1 (91QH)**
- HPAS 500 Physician Assistant Professional Issues and Ethics (2QH)
- HPAS 501 General Medicine and Infectious Disease I (9QH)
- HPAS 502 Introduction to EKG (2QH)
- HPAS 510 General Medicine and Infectious Disease II (9QH)
- HPAS 512 Clinical Decision-Making I (1QH)
- HPAS 513 Physical Assessment (4QH)
- HPAS 515 Psychosocial Aspects of Patient Care (1QH)
- HPAS 518 Emergency Medicine (2QH)
- HPAS 519 Obstetrics and Gynecology (3QH)
- HPAS 520 General Medicine and Infectious Disease III (8QH)
- HPAS 522 Clinical Decision-Making II (2QH)
- HPAS 523 Clinical Procedures (3QH)
- HPAS 525 Geriatrics (2QH)
- HPAS 528 Research and Statistics (2QH)
- HPAS 532 Interprofessional Case Collaborations (3QH)
- HPAS 537 Population Medicine (2QH)
- HPAS 538 Introduction to Clinical Medicine for the Physician Assistant (2QH)
- HPAS 539 Introduction to Pharmacotherapy (1QH)
- HPAS 540 Pediatrics (2QH)
- HPAS 542 Clinical Decision-Making III (2QH)
- HPAS 551 Leadership in the Healthcare Environment (2QH)
- HPAS 600 Pharmacotherapy I (4QH)
- HPAS 610 Pharmacotherapy II (4QH)
- HPAS 620 Pharmacotherapy III (4QH)
- HPAS 646 Advanced Physical Examination (2QH)
- HPAS 650 Complementary Medicine (1QH)
- HPAX 529 Foundations for Interprofessional Practice (2QH)
- HPAX 563 Clinical Anatomy (10QH)

**Year 2 (56QH)**
- HPAS 550 Internal Medicine (6QH)
- HPAS 560 General Surgery (6QH)
- HPAS 565 Family Medicine (6QH)
- HPAS 570 Women’s Health (6QH)
- HPAS 575 Pediatrics (6QH)
- HPAS 580 Emergency Medicine (6QH)
- HPAS 591 Elective Rotation I (6QH)
- HPAS 592 Elective Rotation II (6QH)
- HPAS 690 Master’s Project (8QH)
Assessment for Student Learning

Grading System

A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P  Pass
F  Fail

Assessment Methods

The PA program faculty is committed to providing its students a high quality education that produces exceptional clinicians. In order to maintain our high educational standards, we adhere to the following standards of academic performance.

The standards for Satisfactory academic progress are defined as:

1. Maintaining a minimum grade of at least a C in each course throughout the program. This is determined by:
   a. Achieving a passing grade on all components throughout all coursework in the Program. This includes components such as: written examinations, performance on skills exams (History Taking, Head to Toe examination, Objective Clinical Skills Exam (OSCE)), attendance, and assignments per course syllabi;
   b. Achieving a passing final grade in all courses.

2. Maintaining a minimum cumulative 2.50 GPA beginning the fall quarter of the first year. The cumulative GPA for each student will be first calculated upon completion of the Summer quarter, and is recalculated at the end of each academic quarter.

3. Compliance with the Professionalism Policy set forth in the PA program handbook, and in the CHP Handbook and university catalog.

Assessment of academic progress is done continuously throughout the program. Satisfactory academic progress is assessed through the successful completion of all course related work and curricular activities. In addition to all ongoing student assessment processes, at the end of each year, there is a formal evaluation process to determine a student’s eligibility to progress to the next portion of the program. This process is known as the Formative Evaluation at the end of the first year, and the Summative Evaluation at the end of the second year.

Graduation Requirements

Students must meet the following program requirements:
- 147 quarter hours of required degree program coursework
- Complete all coursework with a grade of C or better
- Successful completion of all course requirements within five years from the date of matriculation
- Maintain a minimum overall 2.5 GPA on a 4.0 scale starting with the fall quarter of the first year
- Completion of a Master’s Project
- Students must complete all course and curriculum work in its entirety

**Population Health (MS)**

**Program Introduction**

The Master of Science degree in Population Health is 45 quarter hours of credit offered in the online delivery format. Degree requirements can be completed in one year as a full-time student or two years if enrolled part-time. The program is designed to prepare students for jobs in the public health and population health industries and in organizations that want to improve the health and well-being of their employees. These individuals could also serve in organizations that provide research and services in the fields of healthcare analytics and health policy. Students will develop an independent project which demonstrates achievement in the areas of focus of the Population Health program. This will be done through completion of a field-based research project that is developed and presented in a capstone course that includes a final portfolio and online presentation of other major projects completed throughout their master’s degree program.

**Admission Requirements**

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree**: Bachelor’s degree from an accredited university or college in any discipline.
- **Grade-Point Average (GPA)**: Minimum cumulative grade-point average (GPA) of 2.75 on a 4.0 scale.
- **Tests**:
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
• The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.

• Work experience in a related health or science field is recommended but not required.

• Students currently enrolled in other programs at Rosalind Franklin University of Medicine and Science should complete an alternative concurrent/short application form which can be accessed via InSite.

• **Letters of Recommendation:** Minimum of one letter of recommendation. A letter from an academician is preferred. For dual degree students, a letter of recommendation from Dean or Director of program is required instead.

• **Personal Statement:** Personal statement addressing professional goals.

• **Prerequisite Courses:** There are no required prerequisite courses.

• **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.

• **Supplemental Application:** This program does not have a supplemental application.

• **Transfer Applicant Policy:** This program does not accept transfer applicants.

• **Non-Degree Applicant Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.

• **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate
means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

The Population Health Master of Science program will accept up to 9 quarter hours of credits earned from an external institution. An admitted student may request transfer credit by meeting the following conditions. No credit will be given for prior learning experiences or proficiency examinations.

The student must:

- Demonstrate that course (s) meets and/or contains equivalent core learning competencies for the requested transfer. This must be shown through a course syllabus and/or other official course material.

- Have earned the credit from a regionally accredited college or university at the graduate level.

- Have earned a final course grade of B or better for the course requesting to transfer. (RFU will accept a Pass grade if the course is graded only on a pass-fail basis.)

- Have earned credits in an RFUMS graduate certificate program which may also be considered for transfer as core or elective credits (for Internal RFUMS transfer credits, the total number may exceed 9 credit hours).
However, students who have completed two existing certificates in Population Health, Population Health Strategies and Population Health Analytics at RFU may transfer (or stack) all certificate credits toward their Master of Science in Population Health.

Internal or external courses for transfer (9 QH) credits must be equivalent to the courses for which they are deemed as satisfying in the master’s degree requirements.

**Core Competencies**

Upon completion of the Master of Science in Population Health, the student will be able to:

- Apply assessment processes to improve the health of populations
- Educate individuals, families, practitioners and relevant stakeholders on community health issues
- Formulate solutions to address deficiencies in health outcomes in any given population
- Engage in the process of inquiry and communication of health status and outcomes for populations
- Develop a depth of knowledge, skill and investigate attitude toward research and leadership expertise in multiple health-related areas

**Program Degree Plan**

**Core Courses (39QH)**

- HPOP 530 Research Methodology I (3QH)
- HPOP 535 Health Economics, Policy and Advocacy (3QH)
- HPOP 540 Essentials of Population Health (3QH)
- HPOP 541 Community Health Assessment and Intervention (3QH)
- HPOP 590 Population Health Field Research Capstone Course (3QH)
- HPOX 508 Healthcare Law (3QH)
- HPOX 509 Risk and Quality Management in Healthcare (3QH)
- HPOX 510 Management Ethics (3QH)
- HPOX 513 Cultural Diversity and the Management of Healthcare (3QH)
- HPOX 515 Healthcare Policy and Delivery Systems (4QH)
- HPOX 530 Statistics for Health Professions (4QH)
- HPOX 625 Public Health Epidemiology (4QH)

**Electives (6QH)**

**Assessment for Student Learning**

**Grading System**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>High Achievement</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Above Average Achievement</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Average Achievement</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure</td>
</tr>
</tbody>
</table>
Grades without Associated Grade Points:

P   Pass
F   Fail

Assessment Methods
Assessment of student learning occurs through course exams, discussion board postings and research projects specific to each course.

Graduation Requirements
Students must meet the following graduation requirements:

- Successful completion of a minimum of 45 quarter hours
  - 36 quarter hours of core courses
  - 6 quarter hours of elective courses
  - 3 quarter hours for the final portfolio course
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
- Successful completion of all course requirements within five years from the date of matriculation

Psychology: Clinical Counseling (MS)
The Clinical Counseling curriculum is designed to prepare students to deliver clinical mental-health services upon graduation. Our students receive training in the identification and treatment of a broad range of mental, nervous and behavioral disorders. A variety of assessment and intervention approaches are covered with an emphasis on empirically supported techniques. Our graduates are well-prepared clinicians and consumers of the research literature. Their training ensures the development of broad-based clinical skills and encourages close, cooperative work with other healthcare specialists and the interprofessional healthcare approach is emphasized in the program and University. Graduates meet the educational requirements for licensure as a professional counselor in Illinois and many other states.

Students who wish to improve their chances of admission to doctoral programs in psychology may wish to pursue the Research Concentration in the Clinical Counseling program. This course of study provides additional experiences in research-related coursework and application of research skills, in addition to the Clinical Service Concentration curriculum, while still meeting the educational requirements for licensure as a clinical counselor in Illinois and many other states.

The Master of Science in Psychology: Clinical Counseling program is typically completed with two years of full-time study. Students follow the course plan for either the Clinical Service Concentration or the Research Concentration depending on which concentration of study they are admitted to.
Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- Significant graduate studies in areas such as psychology, sociology, criminal justice, etc. are recommended. Students seeking admission to the research concentration must have prior coursework in statistics and/or research methods or submit an official quantitative GRE score report as part of the application.
- **Prior Degree**: A bachelor’s degree from an accredited institution of higher education prior to matriculation into the program.
- **Grade-Point Average (GPA)**: A minimum overall GPA of 3.0 on a 4.0 scale for the last two years of undergraduate study is required.
- **Tests**:
  - The Graduate Record Examination (GRE) is optional for all other applicants.
  - The Advanced Psychology GRE is optional for all applicants.
  - GRE scores must be sent directly to Rosalind Franklin University from Education Testing Services (ETS).
- **Letters of Recommendation**: One letter of recommendation is required, two are preferred, from former professors, or employers, familiar with the applicant’s professional or educational capabilities. The Admissions Committee prefers at least one letter from a former professor. Letters from friends, relatives or colleagues will not be considered.
- **Transcripts**: Official transcripts from the degree awarding college or university must be submitted prior to matriculation.
- Basic computer skills including the ability to use email, the internet, word processing, and ability to create presentations and/or use and create spreadsheets.
- All applications that meet admissions requirements are reviewed individually by the program.
- A criminal background check will be performed on admitted students.
- **Prerequisite Courses**: Students applying to the Research Concentration must have completed at least one statistics course and have a grade of B in the course(s).
- **Resume or Curriculum Vitae**: A resume or curriculum vitae is required.
- **Personal Statement**: A personal statement is required.
- **Supplemental Application**: There is no supplemental application.
- **Transfer Applicant Policy**: This program does not accept transfer applicants.
- **Non-Degree Applicant Policy**: This program does not accept non-degree applicants.
- **Early Decision Programs**: This program does not accept early decision applicants.

Technical Standards

Candidates for entry into the Master of Science in Psychology: Clinical Counseling program must possess certain abilities and skills to function effectively and meet the ethical and technical
requirements in a broad variety of classroom, laboratory, research and clinical settings. These essential functions are:

- **Observational:** The candidate must be able to acquire a defined level of required information as presented through lectures, demonstrations and experiences in basic and applied psychology. Furthermore, a candidate must be able to observe a patient or research subject accurately, at a distance and close at hand, using their senses of sight, smell, touch and hearing. The candidate must be able to acquire information from written documents or electronic media, such as a computer monitor. The candidate must be able to visualize information from paper, films, slides or video. Such observation and information acquisition necessitates the functional use of visual, auditory and somatic sensation while being enhanced by the functional use of other sensory modalities. In any case where a candidate’s ability to observe or acquire information through these sensory modalities is compromised, the candidate must demonstrate alternative means and/or abilities to acquire and demonstrate the essential information conveyed in this fashion. If the alternatives are acceptable, it is expected that obtaining and using such alternative means and/or abilities shall be the responsibility of the student. Costs of necessary accommodations should be reasonable and will be borne by the university when not the responsibility of the student or otherwise funded.

- **Communication:** A candidate must be able to speak, hear and observe by sight in order to elicit information, observe patients/clients, describe changes and perceive non-verbal communications. Communication includes verbal and recorded format (writing, typing, graphics or telecommunication). A candidate is expected to independently take paper, computer, practical and comprehensive examinations. A candidate must be able to communicate effectively and sensitively with faculty, fellow students, staff, research subjects, patients, families and other members of the healthcare team. Communication includes speech and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the healthcare team. Communication via electronic media (e.g., computer terminals utilizing a keyboard) is required.

- **Motor and Sensory Systems:** It is required that candidates possess the motor skills necessary to directly perform basic clinical tests, diagnostic procedures and research procedures. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision. This requirement also includes but is not limited to the use of an electronic keyboard. Candidates must be able to move freely and safely about a research or clinical setting and reach across desktops or on top of shelves. The student must be able to travel (utilizing public or private transportation) to clinical affiliate sites or to research sites. Furthermore, the student must perform moderately-taxing, continuous physical work, often requiring prolonged sitting or standing, over several hours.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. In addition, the candidate must be able to comprehend three-dimensional relationships and to understand
the spatial relationships of structures. Problem-solving, the critical skill demanded of all healthcare professionals, requires all of these intellectual abilities. The candidate must be able to perform these problem-solving skills in a timely fashion.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, prompt completion of all responsibilities attendant to working with patients/clients and research subjects, and the development of mature, sensitive, ethical and effective professional relationships with co-workers. The candidate must be able to tolerate physically-taxing workloads and function effectively under variable levels of stress, which may at some points reach a high level of intensity for protracted periods. Some students will take courses that require them to be able to adapt to working with biological substances (e.g., formaldehyde-preserved human tissue). Students must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in clinical problems and situations. The student must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues to improve. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that will be assessed during the admissions and educational process. The student must consistently behave in an ethical and professional manner and comport themselves in a manner consistent with published Ethical Codes of Conduct relevant to their profession.

Note: If a candidate’s ability to acquire and communicate information through vision, hearing or sensory modalities is impaired, they must demonstrate alternative means and/or abilities to assimilate the information and demonstrate that the essential information can be conveyed in this fashion. If the alternatives are acceptable, it is expected that the obtaining and using of such alternative means shall be the shared responsibility of the student and the university. It must be a reasonable accommodation and not an undue hardship for the university.

An effort will be made to work out potential difficulties as long as this does not pose a threat to the well-being of patients, research subjects, other students, faculty, other healthcare team members or the candidate themselves.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

**Transferring credit for required courses**

The limit for waiver of required courses is 10 credit hours (quarter hours). However, the faculty reserves the right to make exceptions for individual students, under exceptional circumstances, who petition the department for an additional exemption to this.

Students who wish to transfer credit for one or more Departmental courses should submit a formal petition to their advisor for each course they wish to waive. With the exception of the fall
quarter of the first year, these petitions must be submitted at least 4 weeks prior to the quarter in which each course in question is offered. The petition will include transcripts of and syllabi for post-baccalaureate courses for which they are seeking transfer credit. Students are not allowed to transfer credits from courses based on their pre-baccalaureate training. Students must have earned a “B” or better for faculty to consider waiving a department course requirement. With the advisor’s approval, the petition will be forwarded to the course instructor. The advisor and department faculty member offering the course in question will evaluate a syllabus with a view toward whether the course taken by the student covered material that is consistent with a scientist-practitioner approach, covers the relevant material in the department course, and provides the knowledge-base needed for the student to acquire the knowledge and skills needed in that departmental course. The course instructor will prepare a means to assess the student’s knowledge and/or skills in the area in question. If the faculty judges the previously completed course meets all requirements and the student to have adequately demonstrated the knowledge and/or skills, then the paperwork will be completed to document the transfer of credit. Transfer credit documentation will include the previously taken course syllabi, and a summary of evidence of mastery. The department chair will review the documentation and provide final approval.

Transferring credit for elective courses
Students who have formally registered for and successfully completed one or more graduate courses at accredited universities, prior to entry into our program, may transfer up to 10 quarter hour credits toward electives. The courses to be transferred must not be redundant with current required course offerings. The faculty will recommend such action to the Dean for approval.

Core Competencies
Upon completion of the Master of Science in Psychology: Clinical Counseling program, the student will:

- Identify and implement empirically supported assessment and intervention strategies
- Understand and identify relevant theoretical and foundational underpinnings to the counseling profession
- Evaluate and integrate research studies into clinical practice
- Understand and uphold professional ethics
- Understand and address issues of diversity in clinical practice
- Experience and integrate interprofessional practice into their daily work as healthcare professionals

Program Degree Plan

Year 1 (38QH)
HPCC 501 Ethical Issues and Standards for Professional Counselors (4.5QH)
HPCC 502 Diagnostic Interviewing and Report Writing (4QH)
HPCC 503 Cognitive and Behavioral Therapy – Child and Adolescent (4.5QH)
HPCC 505 Personality Assessment in Counseling (4.5QH)
HPCX 529 Foundations for Interprofessional Practice (2QH)
HPCX 581 Descriptive Psychopathology (4.5QH)
HPCX 582 Socio and Cultural Foundations of Behavior (4.5QH)
HPCX 655 Theories of Counseling and Psychotherapy (4.5QH)
HPCX 656 Cognitive and Behavioral Interventions (5QH)

Year 2 (35.5QH)
HPCC 600 Substance Abuse Assessment and Treatment (4.5QH)
HPCC 601 Group Dynamics and Counseling (4.5QH)
HPCC 602 Career Counseling and Development (4.5QH)
HPCC 603A Practicum/Internship and Seminar I (5QH)
HPCC 603B Practicum/Internship and Seminar II (5QH)
HPCX 654 Theories of Personality and Emotion (3QH)
HPCX 758 Lifespan Developmental Psychology (4.5QH)
HPCX 759 Family Systems and Therapy (4.5QH)

Concentration-Specific Courses

Clinical Service Concentration (16.5QH):
HPCC 500 Research Methods for Counselors (4.5QH)
Electives (12QH)

Research Concentration (29QH):
HPCX 543 Psychological Statistics I (5QH)
HPCX 544 Experimental Design and Program Evaluation I (4QH)
HPCX 862 Research Practicum (14QH)
Electives (6QH)

Assessment for Student Learning

Grading System
A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P    Pass
F    Fail

Assessment Methods
Letter grades will be assigned to the student’s performance in courses. Students receive regular evaluations in three areas:
• Coursework
• Clinical practica
• Professionalism

Written evaluations are prepared twice by the supervisor of the student’s practicum. The evaluations follow a standard format and give detailed information about the student’s performance in the clinical setting.

Professional conduct is critical to the development of a competent clinician. Students are evaluated regarding their professional conduct in various aspects of graduate school training.

In addition to evaluations concerning performance in specific areas, each student’s progress is reviewed annually, typically in the summer quarter, by the entire faculty. The objective of the annual review is to assess the student’s overall progress in:

• Academics
• Clinical and research domains
• Professional/clinical conduct

Student involvement in programmatic and other professional activities is also considered. Following this evaluation, a brief written summary is provided to the student, and more detailed feedback is available from the student’s advisor.

Graduation Requirements

• Completion of a minimum of 90 credits for clinical service concentration (minimum 78 hours required courses and minimum 12 hours of electives) and 102.5 credits for research concentration (minimum 82.5 hours required courses and minimum 6 hours of electives and 14 hours of research practicum)
• A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all required courses in the program curriculum, electives and a passing grade in practicum courses
• Completion of a minimum of 700 hours of supervised practicum/internship with a supervisor rating of satisfactory or better.

Psychology: Clinical Psychology (MS)

The College of Health Professions at Rosalind Franklin University of Medicine and Science offers a unique opportunity for students on the pathway to earning a PhD degree in Psychology to also earn a Master of Science degree in Psychology. Students who have successfully completed all requirements for the Clinical Psychology track of the Master of Science program will become candidates for the degree.

The Clinical Psychology MS degree is earned en route to the PhD in Clinical Psychology. It is not a terminal degree program. This degree does not directly connect to requirements for licensure in psychology at the master’s level.
Admission Requirements
Applicants must meet the PhD in Psychology requirements for admission and are admitted as candidates for the PhD in Psychology degree.

Technical Standards
Applicants must meet the technical standards identified for the PhD in Psychology program.

Transfer Credits and Advanced Standing
Transfer credits are awarded according to the policy and processes in place for the PhD in Psychology program.

Program Degree Plan
Core Courses
- HPSC 510 Psychological Statistics I (5QH)
- HPSC 511 Psychological Statistics II (4QH)
- HPSC 515 Experimental Design and Program Evaluation (4QH)
- HPSC 520 Descriptive Psychopathology (4.5QH)
- HPSC 560 Cognition and Cognitive Assessment (4QH)
- HPSC 576 Essentials of Physiological Psychology and Behavioral Neuroscience (3QH)
- HPSC 664 Personality Assessment (4QH)
- HPSC 668 Theories of Personality and Emotion (3QH)
- HPSC 669 Theories of Counseling and Psychotherapy (4.5QH)
- HPSC 690 Cognitive and Behavioral Interventions (5QH)
- HPSC 750 Advanced Physiological Psychology Lab (1QH)
- HPSC 754 Lifespan Developmental Psychology (4.5QH)
- HPSC 757 Ethical Issues and Professional Standards in Clinical Psychology (4.5 QH)
- HPSC 784 Professional Seminar in Clinical Fundamentals (4QH)
- HPSX 529 Foundations for Interprofessional Practice (2QH)

Practica
- HPSC 610 Clinical Practicum Supervision (3QH) – Year 2
- HPSC 800 Clinical Practicum (12QH)
- HPSC 850 Research Practicum (12QH)

Assessment for Student Learning
Grading System
- A  4.00 High Achievement
- B  3.00 Above Average Achievement
- C  2.00 Average Achievement
- F  0.00 Failure
Grades without Associated Grade Points:

P Pass
F Fail

Assessment Methods

Letter grades will be assigned to the student’s performance in courses.

Students receive regular evaluations in three areas:

- Coursework
- Clinical practica
- Professionalism

Written evaluations of practicum training are prepared on a biannual basis by the student’s supervisor. The evaluations follow a standard format and give detailed information about the student’s performance in the clinical setting. Professional conduct is critical to the development of a competent clinician. Students are evaluated regarding their professional conduct in various aspects of graduate school training. In addition to evaluations concerning performance in specific areas, each student’s progress is reviewed annually, typically in July, by the entire faculty. The objective of the annual review is to assess the student’s overall progress in:

- Academics
- Clinical and research domains
- Professional/clinical conduct

Student involvement in programmatic and other professional activities is also considered. Following this evaluation, a brief written summary is provided to the student, and more detailed feedback is available from the student’s advisor.

Graduation Requirements

- Completion of two academic years of full time graduate study in the Department of Psychology.
- Complete the required courses totaling 84 quarter hours, with passing grades in accordance with general department criteria for maintaining good standing in the program.
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all required courses in the program curriculum and a passing grade in practicum courses
- Satisfactory completion of the Master’s Thesis
Post-Baccalaureate Certificates

Certificate in Health Administration

Program Introduction

The certificate in Health Administration (HA) prepares students to enhance their leadership skills in the healthcare industry. The four-course (12-13 QH) certificate program is typically completed in one academic year or four quarters of study, and it is offered in the online delivery format. Students enrolled in this certificate program are usually working adults in the healthcare field who seek supplemental knowledge and expertise for career advancement opportunities.

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** Bachelor’s degree from an accredited university or college in any discipline.
- **Grade-Point Average (GPA):** Minimum cumulative grade-point average (GPA) of 2.75 on a 4.0 scale.
- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
- Work experience in a related health or science field is recommended but not required.
- Students currently enrolled in other programs at Rosalind Franklin University of Medicine and Science, should complete an alternative concurrent/short application form that can be accessed via InSite.
- **Letters of Recommendation:** Minimum of one letter of recommendation.
- **Personal Statement:** Personal statement addressing professional goals.
- **Prerequisite Courses:** There are no required prerequisite courses.
- **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
• **Supplemental Application:** This program does not have a supplemental application.

• **Transfer Applicant Policy:** This program does not accept transfer applicants.

• **Non-Degree Application Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.

• **Early Decision Programs:** This program does not accept early decision applicants.

The certificate in Health Administration program uses a rolling admissions process where applications are reviewed, decisions are made and students are enrolled every quarter. Applicants should submit all materials prior to the deadline of the quarter in which they wish to matriculate. To initiate the application process, applicants must submit all required application items through the Health Administration Management and Policy Central Application Service (HAMPCAS).

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

• **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

• **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual
material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credit will be awarded for the certificate program.

**Core Competencies**

Upon completion of the certificate, the student will:

- Apply knowledge of health administration and leadership
- Analyze healthcare data to inform decisions about healthcare facility management
- Recommend evidence-based interventions for organizational efficiency
- Assess issues of healthcare policies and the healthcare environment

**Program Plan**

**Core Courses (12QH or 13QH)**

HHCM 521 Evidence-Based Management (3QH)
HHCM 523 Current Topics in Healthcare (3QH)
HHCM 524 Organizational Behavior and Human Resources (3QH)

*and select one of the following courses:*

- HHCM 522 Healthcare Policy and Delivery Systems (4QH)
- HHCM 525 Strategic Planning and Leadership in Healthcare (3QH)

**Assessment for Student Learning**

**Grading System**

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<tr>
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<tbody>
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<td>Above Average Achievement</td>
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</tbody>
</table>
C 2.00 Average Achievement
F 0.00 Failure

Grades without Associated Grade Points:
P Pass
F Fail

Assessment Methods
Assessment of student learning occurs through course exams, discussion board postings and research projects specific to each course.

Graduation Requirements
Students must meet the following graduation requirements:

- Successful completion of a minimum of 12 or 13 quarter hours of program courses
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
- Successful completion of all course requirements within four years from the date of matriculation

Certificate in Health Professions Education

Program Introduction
The certificate in Health Professions Education is designed to introduce health professions educators to a variety of theories of learning and learning styles so they can identify a student’s unique learning needs and adapt their teaching to provide more individualized and meaningful experiences. The program addresses the needs of educators who are teaching primarily in the classroom setting and the specific unique needs for teaching in the clinical setting. This knowledge of learning is applied to the development of a course in the student’s area of interest. Students learn the power of assessment for improved learning and are given the opportunity to design clinical assessment tools. Learning is synthesized through reflection during the final portfolio project. Students can complete the requirements for the certificate in one year or less. The certificate program is delivered entirely online. Students who complete the certificate have the option of later enrolling in the Master of Science in Health Professions Education and applying all certificate courses to the degree.

Admission Requirements
In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree**: Bachelor’s degree from a regionally accredited college or university.
- **Prerequisite Courses**: There are no required prerequisite courses.
- **Grade-Point Average (GPA)**: Minimum cumulative grade-point average (GPA) of 2.5 on a 4.0 scale.
• **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.

• **Resume or Curriculum Vitae:** A resume or curriculum vitae (CV) is required. Work experience as an educator in a related health or science field is preferred and strongly recommended but not required. If you have experience in these areas, please detail it on your resume or CV.

• **Non-Degree Applicant Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.

• **Personal Statement:** This program does not require a personal statement.

• **Transfer Applicant Policy:** This program does not accept transfer applicants.

• **Letters of Recommendation:** One letter of recommendation is required, two are preferred, from professionals and/or academicians who know the applicant well.

• **Supplemental Application:** This program does not have a supplemental application.

• **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.

Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.

Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects in both verbal and recorded format (writing, typing, graphics or telecommunication).

- **Motor:** The candidate must be able to participate in lengthy written discussions and compose lengthy written assignments and projects. For any required research the candidate needs to be able to carry out and report on a research project. Working in an online course environment requires that the candidate be able to remain at the computer for prolonged intervals.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credit will be awarded for the certificate program.

**Core Competencies**

Upon completion of the certificate in Health Professions Education, the student will:
• Apply learning theories to the development of either classroom or clinical education programs to create effective learning environments that stimulate learning
• Develop a course in an area of expertise that meets the individual learning needs of a diverse student population
• Evaluate student performance and assess educational program outcomes in either classroom or clinical settings
• Reflect on their skills as an educator in order to work toward continuous improvement

Program Plan

Core Courses (15QH)

HHPE 510 Learning Theories (3QH)
HHPE 512 Instructional Presentation Skills (3QH)
HHPE 535 Instructional Design for Health Professions Education (4QH)
HHPE 540 Classroom Assessment (4QH)
HHPE 685 Portfolio Presentation (1QH)

Assessment for Student Learning

Grading System

A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P   Pass
F   Fail

Assessment Methods

Students enrolled in the certificate in Health Professions Education program are evaluated using multi-faceted assessments that include but are not limited to written papers, discussions, group projects, case studies, poster presentations, course design projects and online exams. A capstone project which includes a teaching portfolio is used to assess student learning at the completion of the program coursework.

Graduation Requirements

Students must meet the following program requirements:

• Successful completion of a minimum of 15 quarter hours are required according to the certificate program curriculum
• Successful completion of all course requirements within four years from the date of matriculation
• Successful completion of a certificate portfolio
• A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum

Certificate in Lifestyle Medicine

Program Introduction

The Lifestyle Medicine (LM) certificate will provide future or present healthcare professionals with the knowledge necessary to work with patients and clients to provide evidence-based healthcare that encourages lifestyle behavior change to prevent, treat, and reverse chronic disease. Upon completion of the certificate, you will be prepared to apply evidence-based Lifestyle Medicine information to enhance overall wellness of those you will work with. You will complete four fully online courses for a total of 12 quarter hours of credit to complete the certificate.

Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

• **Prior Degree:** Bachelor’s degree from an accredited university or college in any discipline.
• **Grade-Point Average (GPA):** Minimum cumulative grade-point average (GPA) of 2.75 on a 4.0 scale.
• **Prerequisite Courses:** Successful completion of the following specific coursework recorded on the applicant’s official transcript with a grade of C or better (4 quarter hours):
  o General Biology with Lab
  o General Chemistry with Lab
  o Anatomy or Physiology
• **Tests:**
  o The Graduate Record Examination (GRE) is not required.
  o The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or
A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.
In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credit will be awarded for the certificate program.

**Core Competencies**

Upon completion of the certificate, the student will:

- **Leadership:** Promote healthy behaviors as foundational to medical care.
- **Knowledge:** Demonstrate knowledge of the evidence that specific lifestyle changes have positive effects on life.
- **Assessment Skills:** Assess the social, psychological predispositions of patients’ behaviors and resulting health outcomes.
- **Management Skills:** Use nationally recognized guidelines to assist patients in self-managing their health behaviors and lifestyles.
- **Use of Office and Community Support:** Have the ability to practice in an interprofessional team of health care providers and support a team approach.
Program Plan

Core Courses (12QH)

HLSM 500 Chronic Preventable Disease and Introduction to Lifestyle Medicine (3QH)
HLSM 501 Strategies to Manage Mental and Emotional Health and Avoiding Risky Substances (3QH)
HLSM 600 Concepts of Population Health and Personal Health (4QH)
HLSX 570 Modern Nutrition (3QH)

Assessment for Student Learning

Grading System

A 4.00 High Achievement
B 3.00 Above Average Achievement
C 2.00 Average Achievement
F 0.00 Failure

Grades without Associated Grade Points:

P Pass
F Fail

Assessment Methods

Assessment of student learning occurs through course exams, discussion board postings, assignments and research projects specific to each course.

Graduation Requirements

Students must meet the following graduation requirements:

- Successful completion of a minimum of 12 quarter hours of program courses
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
- Successful completion of all course requirements within four years from the date of matriculation

Certificate in Nutrition for Healthcare Professionals

Program Introduction

The certificate in Nutrition for Healthcare Professionals is designed to provide present or future healthcare professionals with the knowledge necessary to work with patients and clients to encourage diet practices consistent with health and well-being. The certificate provides healthcare professionals with up-to-date, evidence based information for integrating nutrition into their practice. All coursework is completed online to suit the needs of self-motivated, goal-oriented individuals and no on-campus attendance is required. The program can be completed in as little as a year with up to four years for completion.
Admission Requirements

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** Bachelor’s degree from a regionally accredited college or university.
- **Grade-Point Average (GPA):** Cumulative minimum grade-point average (GPA) of 2.75 on a 4.0 point scale in the last two years of undergraduate study.
- Work or experience in a related health or science field is recommended but not required.
- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years from the date when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
- **Letters of Recommendation:** One letter of recommendation is required, two preferred, from professionals and/or academicians who know the applicant well (i.e., pre-health advisors/committees, professors or supervisors). Letter writers are encouraged to share their contact information. Letters must include a signature and be on official letterhead.
- **Resume or Curriculum Vitae:** This program does require a resume or curriculum vitae.
- **Personal Statement:** This program does require a personal statement.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** This program does not accept non-degree applicants.
- **Prerequisite Courses:** Successful completion of the following specific coursework recorded on the applicant’s official bachelor’s degree transcript with a grade of C or better (4 quarter hours):
  - Biology
  - General Chemistry with Lab
  - Physiology/Anatomy
- **Supplemental Application:** This program does not have a supplemental application.
- **Early Decision Programs:** This program does not accept early decision applicants.
Technical Standards

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.
If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**
No transfer credit will be awarded for the certificate program.

**Core Competencies**
Upon completion of the Nutrition for Healthcare Professionals certificate, the student will be able to apply knowledge of nutrition and health promotion to professional activities.

**Program Plan**

**Core Courses (12QH)**

*The following course must be taken first unless department approves otherwise:*

HNUT 510 Modern Nutrition (3QH)

*Students then complete the following three courses in any order:*

HNUT 542 Complementary Medicine and Dietary Supplements (3QH)
HNUT 555 Nutrition in the Lifecycle (3QH)
HNUT 576 Nutrition and Human Physical Performance (3QH)

**Assessment for Student Learning**

**Grading System**

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<td>F</td>
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</tbody>
</table>

Grades without Associated Grade Points:

P Pass
F Fail

**Assessment Methods**

Online student learning is assessed using both formative and summative assessments. Formative assessments include discussion activities, written assignments, written reflections and quizzes. Summative assessments include written papers, projects, presentations and exams.

**Graduation Requirements**

Students must meet the following program requirements:

- Satisfactory completion of 12 quarter hours of program course requirements
- Successful completion of all coursework within four years from the date of matriculation
- A cumulative grade-point average (GPA) of 3.0 on a 4.0 scale for the program
Certificate in Population Health Analytics

Program Introduction
The certificate in Population Health Analytics is four courses (14 QH), offered in the online format, that are typically completed in one academic year or four quarters of study. This certificate will prepare students for employment in the population health, public health and health and wellness fields. It will provide individuals with solid skills in the field of health analytics to critically evaluate healthcare programs and policy interventions using sound research methodologies, statistical techniques and ethnographic principles. Students will also become competent in using informatics and the epidemiological approach in making strategically focused healthcare recommendations based on research findings.

Admission Requirements
In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** Bachelor’s degree from an accredited university or college in any discipline.
- **Grade-Point Average (GPA):** Minimum cumulative grade-point average (GPA) of 2.75 on a 4.0 scale.
- **Tests:**
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
    - If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
    - Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
    - Test scores must be a test taken within two years of the date from when a complete application is submitted.
    - The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.
- Work experience in a related health or science field is recommended, but not required.
- Students currently enrolled in other programs at Rosalind Franklin University of Medicine and Science, should complete an alternative concurrent/short application form which can be accessed via InSite.
- **Letters of Recommendation:** Minimum of one letter of recommendation. A letter from an academician is preferred.
- **Personal Statement:** Personal statement addressing professional goals.
- **Prerequisite Courses:** There are no required prerequisite courses.
- **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
- **Supplemental Application:** This program does not have a supplemental application.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.
- **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
  - Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.
  - Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.
- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate.
large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credit will be awarded for the certificate program.

**Core Competencies**

Upon completion of the Population Health Analytics certificate, the student will be able to:

- Analyze data to measure performance using industry-relevant statistical software packages
- Analyze data to measure patient outcomes using industry-relevant statistical software packages
- Interpret healthcare data to make recommendations to improve healthcare quality while containing cost
- Employ analytical tools and techniques to answer questions related to healthcare issues
- Interpret data effectively to prepare technical reports
- Create recommendations to increase the effectiveness of healthcare organizations through the applications of information systems

**Program Plan**

**Core Courses (13QH)**

- HPOP 508 Health Program Planning and Evaluation (3QH)
- HPOP 530 Research Methodology I (3QH)
- HPOX 504 Healthcare Informatics (3QH)
- HPOX 625 Public Health Epidemiology (4QH)

**Assessment for Student Learning**

**Grading System**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>4.00</td>
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<tr>
<td>B</td>
<td>3.00</td>
</tr>
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</table>
Assessment Methods
Assessment of student learning occurs through course exams, discussion board postings and research projects specific to each course.

Graduation Requirements
Students must meet the following graduation requirements:

- Successful completion of a minimum of 13 quarter hours of program courses
- A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
- Successful completion of all course requirements within four years from the date of matriculation

Certificate in Population Health Strategies
Program Introduction
The certificate in Population Health Strategies is four courses (13 QH) offered in the online format, and the program can typically be completed in one academic year or four quarters of study. The certificate is designed to prepare students for employment in the fields of population health, public health and health and wellness. It also will prepare those who work in health-related businesses who want to understand and improve the health and well-being of the population. The certificate will be appropriate for individuals who intend to enhance their skills in their current healthcare career such as healthcare administration and management, medicine, physical therapy and physician assistant studies. It will also appeal to individuals who are career changers and want to pursue new opportunities in the emerging field of population health.

Admission Requirements
In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- Prior Degree: Bachelor’s degree from an accredited university or college in any discipline.
- Grade-Point Average (GPA): Minimum cumulative grade-point average (GPA) of 2.75 on a 4.0 scale.
- Tests:
  - The Graduate Record Examination (GRE) is not required.
  - The Test of English as a Foreign Language (TOEFL) may be required.
• If the bachelor’s degree is earned outside the U.S. and/or U.S. citizenship or permanent residency is not held, demonstrated proof of English proficiency is required via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
• Minimum scores for the Internet Based Test (IBT) of 100 or the equivalent is recommended for graduate school with no category score being lower than 22.
• Test scores must be a test taken within two years of the date from when a complete application is submitted.
• The language test score requirement may be waived if an applicant has demonstrated academic success as a full-time student at a U.S. college or university for at least two consecutive years, or if the applicant is from a country in which English is a primary language.

• Work experience in a related health or science field is recommended but not required.
• Students currently enrolled in other programs at Rosalind Franklin University of Medicine and Science, should complete an alternative concurrent/short application form which can be accessed via InSite.
• **Letters of Recommendation:** Minimum of one letter of recommendation. A letter from an academician is preferred.
• **Personal Statement:** Personal statement addressing professional goals.
• **Prerequisite Courses:** There are no required prerequisite courses.
• **Resume or Curriculum Vitae:** A resume or curriculum vitae is required.
• **Supplemental Application:** This program does not have a supplemental application.
• **Transfer Applicant Policy:** This program does not accept transfer applicants.
• **Non-Degree Applicant Policy:** The program may consider applicants who hold a bachelor’s degree from an accredited college or university and who meet the admission requirements of the program.
• **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**

A candidate for an online graduate degree must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

• **Observation:** The candidate must be able to use a computer to enter and acquire information and to be capable of utilizing the university’s course management software and any other required software or technology. This entails significant use of a computer monitor to fully participate by reading and responding in course activities such as class discussions, group projects, utilization of web-based library resources to search for information, and linking to course readings and video presentations. Furthermore, a candidate must be able to:
Accurately acquire information from textbooks and other written documents, and assimilate information as presented in images from slides, video or other forms of modern electronic media.

Interpret graphic images and other forms of data readout (such as statistics, graphs, spreadsheets, etc.) with or without the use of assistive devices.

Observe experimental results or subjects accurately.

In any case where a candidate’s ability to read or acquire information using the computer, textbook or other written documents is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student, subject to reasonable accommodations that may be granted under the ADA.

- **Communication:** The candidate must be able to communicate effectively, efficiently and appropriately with faculty, staff, fellow students and research subjects, including but not limited to verbal, written, typed, or graphic communication. The candidate must be able to participate in written discussions and compose lengthy written assignments and projects.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize intellectual material; and, if required, the candidate needs to be able to carry out and report on a research project. The candidate must be able to utilize these problem-solving skills in a timely fashion. They must have the mental ability to assimilate, learn and communicate large volumes of complex, technically detailed information in a timely manner. Candidates must be able to apply the concepts and information they have learned.

- **Behavioral and Social Attributes:** The candidate must possess the emotional health required for full utilization of their intellectual abilities. The candidate must exercise good judgment and self-control, be able to function effectively in stressful situations and adapt to changing environments. Development of effective working relationships with fellow students and faculty in an online learning environment is required. The candidate must be able to critically evaluate their own performance, accept constructive criticism and investigate avenues toward improvement.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credit will be awarded for the certificate program.

**Core Competencies**

Upon completion of the Population Health Strategies certificate, the student will be able to:

- Apply knowledge of population health
- Assess community health issues
- Analyze healthcare data
• Recommend evidence-based health interventions
• Integrate interprofessional communication practices to engage the community

Program Plan
Core Courses (13 QH)
HPOP 540 Essentials of Population Health (3QH)
HPOP 541 Community Health Assessment and Intervention (3QH)
HPOX 509 Risk and Quality Management in Healthcare (3QH)
HPOX 530 Statistics for Health Professions (4QH)

Assessment for Student Learning
Grading System
A  4.00 High Achievement
B  3.00 Above Average Achievement
C  2.00 Average Achievement
F  0.00 Failure

Assessment Methods
Assessment of student learning occurs through course exams, discussion board postings and research projects specific to each course.

Graduation Requirements
Students must meet the following graduation requirements:
• Successful completion of a minimum of 13 quarter hours of program courses
• A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum
• Successful completion of all course requirements within four years from the date of matriculation

Pre-Matriculation Program (PMP)
The Pre-Matriculation Program (PMP) is a multi-track academic enrichment program sponsored by the Rosalind Franklin University of Medicine and Science (RFUMS). PMP offers highly motivated post-baccalaureate students from disadvantaged backgrounds the opportunity to enroll at no cost in a non-degree curriculum track. The curriculum gives students the ability to experience medical school level coursework and grants additional academic development and experience to students seeking to improve their competitiveness as a medical or other health professions degree applicant. PMP students benefit from focused faculty, staff and alumni engagement.
mentors who provide academic support and skill development in a small cohort with whom they can experience professional school life and other enrichment experiences to which they might not otherwise have access to.

Rosalind Franklin University of Medicine and Science is committed to increasing the diversity of the university’s enrollments and thereby helping to create a well-trained, diverse health professions workforce committed to working with underserved and disadvantaged populations to reduce health disparities.

Eligibility

In keeping with its goal of increasing the diversity of enrollment in health profession programs, PMP encourages applications from students who come from groups that are underrepresented in medicine. For instance, some applicants may come from economically disadvantaged backgrounds or from racial and ethnic groups that historically have been underrepresented in medicine, or may attend schools with largely socioeconomically disadvantaged or underrepresented student bodies. Other applicants may come from geographic areas whose residents historically have been underrepresented in medicine or lacked access to medical services.

Economically disadvantaged: A student who comes from a “low income family” with an annual income below the thresholds published in the Federal Register by the Secretary for use in all health professions programs. For the most updated document search the Federal Register for the document with the title: "Low Income Levels Used for Various Health Professions and Nursing Programs.

Educationally disadvantaged:

- A student who comes from a community college or a less competitive four-year institution as defined by Barron’s Profiles of American Colleges.
- Standardized test scores (ACT/SAT) at student’s school are markedly below other institutions, or student performance on standardized tests (ACT/SAT) is below national averages, and student has an overall grade point average below 3.0 or a science grade point average below 2.90.
- A student who attended secondary school in a financially-designated poor district or has parents or other adults in the household who did not graduate from high school.
- A student who lacked the opportunity to gain academic enrichment from other sources.

Socially disadvantaged: A student who comes from an environment that has inhibited (but not prevented) him or her from obtaining the knowledge, skills and abilities required to enroll in and successfully complete an undergraduate course of study that could lead to a career in the health sciences. This includes, but is not limited to: first generation college students, students limited by their community setting (rural, inner city or reservation), and students with a certified learning and/or physical disability.

Demonstrated commitment to improving the health of the underserved and disadvantaged populations: Students who are motivated by personal life experiences with underserved
communities and/or experiences with disadvantaged health issues to pursue training in healthcare/medicine. Significant volunteer or other work for a clinic or agency serving the underserved or disadvantaged populations (local, national or international).

Students meeting any of these criteria are encouraged to apply.

**Admission Requirements**

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** To be considered for admission, you must have a BA or BS or complete the requirements for a degree before enrollment. The degree must be from a regionally-accredited institution

- **Prerequisite Courses (C or better):**
  - Biology or Zoology with accompanying labs (1 year/2 semesters)
  - Inorganic/General Chemistry with accompanying labs (1 year/2 semesters)
  - Organic Chemistry with accompanying lab (1 semester)
  - Physics with accompanying lab (1 year/2 semesters)
  - Behavior and/or Social Science (such as Introduction to Psychology and Introduction to Sociology) (2 courses)

  The Admissions Committee recommends but does not require human anatomy, physiology, molecular biology, biochemistry, and statistics

- **Test Scores:** A competitive score on the MCAT exam is required for students interested in a career in a profession that requires an MCAT (allopathic, allopathic podiatry). For other professions, the appropriate standardized exam score is required (DAT, GRE, PCAT). Scores are to be no more than three years old

- **Grade-Point Average (GPA):** Competitive overall and science GPAs

- **CASPer Examination:** All applicants are required to complete and submit a CASPer score for that application cycle

- **Letters of Recommendation:** Either one committee letter or three individual letters of recommendations from persons involved in the student’s previous educational experience are required

- **Experience, Leadership, and Volunteerism:** Applicants must demonstrate interest in and understanding of the healthcare field and its various components. Applicants should also be able to convey their motivation and commitment to health care as demonstrated by previous employment, volunteer work or other experiences. The Admissions Committee also seeks leadership characteristics through academic or community service activities as well as a commitment to public service through a variety of humanitarian activities

- **Communication:** The PMP program is designed for students who seek to increase their competitiveness before applying to a professional program. Applicants should demonstrate strong oral and communication skills throughout their application

- **Resume or Curriculum Vitae:** Included in the RFUCAS application
• **Personal Statement:** Included in the RFUCAS application
• **Transfer Applicant Policy:** This program does not accept transfer applicants

**Technical Standards**

A candidate for the PMP non-degree program must possess certain abilities and skills, which include observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social attributes.

- **Observation:** The candidate must be able to acquire information as presented through demonstration and experiences in the basic sciences. This includes information conveyed through physiological and pharmacological demonstrations in animals, microbiological cultures and microscopic images of microorganisms and tissues in normal and pathological states. Furthermore, a candidate must be able to:
  - Observe experimental results or subjects accurately, acquire information from written documents and visualize information as presented in images from paper, films, slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as oscilloscopes, computer screens, gels, etc.) with or without the use of assistive devices.

In any case where a candidate’s ability to observe or acquire information is compromised, the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student.

- **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively with research subjects, faculty, staff and colleagues.

- **Motor:** The candidate must possess the motor skills necessary to design and perform laboratory experiments and statistical analysis of collected data.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize. The candidate must be able to utilize these problem-solving skills in a timely fashion.

- **Behavioral and Social Attributes:** The candidate must work to their fullest potential while exercising good judgment. They must be able to function effectively in stressful situations and adapt to changing environments. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities required for a successful scientific career, and are assessed during the admissions and educational process.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**

No transfer credits or advanced standing will be awarded regardless of previous experience. No credit will be given for prior learning experience. No credit can be earned through proficiency examinations.
**Standard Program Plan**

*PMP students will typically take the following courses:*

HBMS 503 Clinical Molecular Cell Biology (3.5QH)
HBMS 504 Medical Biochemistry (5QH)

*If a PMP student does not complete the above with an acceptable grade, they may be asked to take the following course(s) and achieve an acceptable grade:*

HBMS 506 Physiological Basis of Medicine (8QH)
HBMS 507 Medical Neuroscience (6QH)

*Additional coursework or remediation may be required by the program if any of the above is not completed satisfactorily.*

**Assessment for Student Learning**

**Grading System**

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<tr>
<th>Grade</th>
<th>Points</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>High Achievement</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Above Average Achievement</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Average Achievement</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure</td>
</tr>
</tbody>
</table>

Grades without Associated Grade Points:

P  Pass
F  Fail

**Assessment Methods**

Course-level assessment includes unit exams, written assignments, class participation and presentations.
College of Nursing (CON)

Mission
To compassionately educate a diverse community of nurse leaders who demonstrate excellence in advancing interprofessional, equitable and ethical care. This mission is achieved through excellence in teaching, learning and assessment; advancement of implementation science; strong partnership networks; and service to others.

Vision
To build a nursing workforce, aligned with population needs, that advances health equity and transforms the health and wellbeing of Lake County, the region, and our nation.

Values
Diversity • Excellence • Innovation • Integrity • Mentorship • Scholarship • Scientific Curiosity

Programs of Study
Doctor of Nursing Practice: Psychiatric Mental Health Nurse Practitioner (DNP)

Doctor of Nursing Practice: Psychiatric Mental Health Nurse Practitioner (DNP)

Program Introduction
This 33-month program of study was created for registered nurses who wish to continue their education to become a Board Certified Psychiatric Mental Health Nurse Practitioner (PMHNP-BC) and earn the Doctor of Nursing Practice degree. PMHNPs are advanced practice nurses who focus on the care of individuals, across the lifespan, at risk for developing and/or having a diagnosis of psychiatric disorders or mental health problems. The PMHNP provides primary mental health care, including assessment, diagnosis, and treatments such as psychotherapy and psychopharmacology. Successful students will be awarded a DNP degree upon program completion and will be recommended to take the American Nurses Credentialing Center’s Board Certification Exam for Psychiatric Mental Health Nurse Practitioners, a requirement for entry to practice as a PMHNP. The curriculum is delivered both in person and online, with live and virtual simulations, as well as synchronous and asynchronous discussions aligned with the content. PMHNP residents complete over 1000 hours of clinical training during their program of study. Students will be immersed in both outpatient and inpatient experiences across the lifecycle, with clinical preceptors identified and developed by the program. PMHNP practice is necessarily holistic and at the forefront of considering the needs of the individual, family, group and community. PMHNPs assume roles as primary mental health care providers, consultants, systems managers, and policy advocates across a variety of settings. The DNP degree for entry to
practice as a PMHNP is highly recommended by the American Association of College of Nursing and by the Nursing Organization of Nurse Practitioner Faculties. Our program is designed to provide graduates with the knowledge, skills, and practice to keep up with expectations of the profession both today and in the future. Stay ahead of the requirement and earn your DNP now.

Mission
The RFU College of Nursing, Psychiatric Mental Health Nurse Practitioner program educates registered nurses with the advanced knowledge, skills, and values necessary for providing exemplary evidence-based, advanced-practice, psychiatric mental healthcare services in a holistic and interprofessional environment.

Program Accreditation
The RFUMS College of Nursing is seeking accreditation for its DNP-PMHNP program through the Commission on Collegiate Nursing Education (CCNE). This process occurs following the matriculation of students and in accordance with CCNE guidelines.

Commission on Collegiate Nursing Education
655 K Street, NW, Suite 750
Washington, DC 20001
(202) 887-6791
www.aacnursing.org/CCNE

The College of Nursing’s process and timeline for seeking CCNE accreditation is shown below:

1. July 2022: College submits a request for new applicant status, which signifies affiliation, not accreditation.
3. May 2024: The College submits a CCNE Self-Study for all its Nursing Programs.
4. June 2024: The College hosts a site visit with the CCNE Accreditors.
5. December 2024: The accreditation decision is rendered by the CCNE and is made retroactive to June 2024 (time of site-visit).

Admission Requirements
Applications for admission into the program are accepted beginning with the published start date for each admission cycle. During each cycle, applicants will be interviewed, and offers of acceptance made, until all available seats in the cohort have been filled. The admission cycle will close on the published date, or sooner, if all seats have been filled—therefore, early application is recommended. Admission once per year in the Spring-Summer for Fall start.

In addition to the university’s minimum requirements, applicants must meet the following program requirements which are in compliance with the requirements established by the CCNE:
• Submission of all PMHNP program application materials by published deadline (or whenever all seats in the class have been filled).
• Submission of all undergraduate- and graduate-level transcripts by published deadline (or whenever all seats in the class have been filled).
• **Grade-Point Average (GPA):** A minimum overall grade-point average (GPA), science GPA, and nursing GPA of 3.0 on a 4.0 point scale is preferred.
• **Prior Degree:** A Bachelor of Science in Nursing (BSN) or a Master of Science in Nursing (MSN) degree from an accredited institution must be completed prior to application.
• Minimum of one year of work experience in a psychiatric or mental health practice setting, preferably in the role of a psychiatric mental health registered nurse, is highly encouraged at the time of matriculation.
• **Test of English as a Foreign Language (TOEFL) scores:** Required for applicants who earned their BSN or MSN degree from outside the U.S. and/or do not hold U.S. citizenship or permanent residency.
  o You are required to demonstrate proof of English proficiency via an official TOEFL report that includes a total score and category scores in reading, writing, listening and speaking.
  o The TOEFL requirement may be waived at the program’s discretion, if the applicant has been a full-time student at an accredited U.S. college or university for at least two consecutive years, or is from a country in which English is the primary language.
  o A TOEFL iBT (Internet-based test) of 100 or the equivalent is recommended and with no category score being lower than 22.
• Interview with the Doctor of Nursing Practice Program Admissions Committee.
• **Prerequisite Courses:** There are no required prerequisite courses. Completion of a biostatistics course within the past two years is highly recommended.
• **Professional References:** Applicants must provide references from three individuals that are able to attest to the candidate’s academic or clinical performance.
  o Professor or faculty member from your nursing education program
  o Nursing work supervisor (i.e. the person responsible for your annual nursing employment performance review)
  o Other healthcare professional with whom you engaged as part of a patient-centered interprofessional team
• **Resume or Curriculum Vitae:** A curriculum vitae (CV) is required as part of the Nursing CAS application.
• **Career Motivation/Personal Statement:** Applicants are required to submit a short essay (no more than 500 words) explaining why they want to become a Psychiatric Mental Health Nurse Practitioner (PMHNP).
• **License:** Current unencumbered license as a registered nurse in the United States, its territories or protectorates at the time of matriculation.
• **Supplemental Application:** This program does not have a supplemental application.
• **Transfer Applicant Policy:** Transfer applicants are encouraged to contact the program before applying.
• **Graduate Record Exam (GRE):** Not required unless considering applicants with GPAs below 3.0.

• **Early Decision Programs:** During each admission cycle, the Department of Psychiatric Mental Health Nursing interviews applicants, and makes offers of acceptance; the admission cycle will close on the published date, or sooner, if all available seats in the class have been filled. Therefore, early application is recommended.

### Technical Standards

#### What is the Role of an Individual Psychiatric Mental Health Nurse Practitioner?

The scope of practice of the PMHNP is continually expanding, consistent with the growing needs for mental health services and the expansion in scientific and nursing knowledge. PMHNPs provide a full range of services that constitute psychiatric mental health primary care treatment. PMHNPs are accountable for their own services and are academically prepared to perform services independent of other disciplines. To perform these role-related standards of practice, a PMHNP student must possess abilities and skills that are observational, communicational, intellectual-conceptual (integrative and quantitative), as well as appropriate behavioral and social skills. The use of a trained intermediary is not acceptable in any clinical situation in that it implies that the judgment of the trainee must be mediated by the powers of selection and observation of a third party.

The following technical standard guidelines are based on those recognized as essential to the study and practice of psychiatric mental health advanced practice nursing. These guidelines specify the attributes considered essential for completing training and for enabling each graduate to enter clinical practice.

All students must possess the intellectual, physical, and emotional capabilities necessary to undertake the required curriculum in a reasonably independent manner without having to rely on intermediaries. All students must be able to achieve the levels of competence required by the program goals and objectives.

It is the societal responsibility of the PMHNP program to train competent healthcare providers who are able to demonstrate extensive knowledge, communication, and critical thinking skills. The categories described below address these concepts and are referred to as technical standards required to achieve these expectations, satisfactorily progress through the program, and graduate. These categories include: observation, communication, motor function, intellectual-conceptual (integrative and quantitative) abilities, and behavioral and social attributes. Candidates who have questions regarding these technical standards, or who may need to request reasonable accommodation(s) to meet these technical standards are encouraged to contact the ADA Coordinator (information detailed below).

• **Observation:** Candidates must acquire a defined level of information presented in the form of demonstrations and experiences. Examples may include: physical examination skills with standardized patients, and simulated and actual patient encounters related to mental health services. For example, utilizing skills obtained throughout the curriculum,
candidates must be able to acquire information from a patient through a complete physical and mental health examination.

- **Communication:**
  - Candidates must communicate effectively, efficiently, and empathetically with patients and families, as well as faculty, staff, peers, and other healthcare providers.
  - Candidates must be able to obtain a medical history; describe changes in mood, behavior, posture, and activity; interpret non-verbal aspects of communication; document and relay information clearly and accurately; develop therapeutic rapport with patients.

- **Motor Function:**
  - Candidates must be able to perform a complete physical exam, following appropriate training by the nursing program.
  - Candidates must also be able to respond promptly to general and emergent clinical situations.

- **Intellectual-Conceptual (integrative and quantitative) Abilities:**
  - Candidates must be able to acquire information through a variety of modalities including, but not limited to: classroom instruction; small group, team, and collaborative activities; individual study; preparation and presentation of reports; simulations; and use of computer technology.
  - Candidates must also be able to comprehend three-dimensional relationships and understand the spatial relationships of structures.
  - Candidates must measure, calculate, reason, analyze, integrate, and synthesize.
  - Candidates must have the ability to formulate and test hypotheses that enable effective and timely problem-solving in nursing diagnosis and care of patients in a variety of clinical settings and healthcare systems.

- **Behavioral and Social Attributes:**
  - Candidates must possess the maturity and emotional health required for: full utilization of intellectual abilities; the use of good judgment; the prompt completion of all responsibilities attendant to the curriculum and to the nursing diagnosis and care of patients; and the development of mature, sensitive and effective relationships with patients, families, other healthcare providers, faculty, staff, and peers.
  - They must display characteristics of integrity, honesty, conscientiousness, and empathy.
  - Candidates must be able to collaborate, accept and provide appropriate and constructive feedback, and take personal responsibility for making appropriate and positive changes.
  - Candidates must have the physical and emotional stamina and resilience to tolerate taxing workloads and to function in a competent and professional manner under highly stressful situations.
  - Candidates must be able to display flexibility and adapt to changing environments.

The PMHNP Program at Rosalind Franklin University of Medicine and Science supports students who qualify for reasonable accommodations under the Americans with Disabilities Act.
Terminal Doctoral Learning Outcomes

- Analyze, synthesize, and apply established and evolving ways of knowing from nursing science, as well as other disciplines (including the liberal arts), to inform ongoing professional development, practice and research.
- Conduct a comprehensive assessment of the individual’s functional area (mental health) in consideration of contributing factors (e.g., genetic/genomic, pharmacogenetic, environmental, and cultural), and provide treatment in alignment with the individual’s goals, in a compassionate, coordinated, and developmentally appropriate manner.
- Contribute to system-level, population-health planning using strategies such as assessment of system capabilities to serve a target sub-population’s healthcare need, analysis of the cost-benefit consequences of population interventions, ethical decision making, and advancement of equitable health care policy.
- Contribute to the critical appraisal of diverse sources of evidence, and collaborate in the development, translation, implementation, and evaluation of new/revised policies that support evidence-based practice, quality outcomes, and patient safety.
- Collaborate in the application and evaluation of change initiatives that support a culture of patient safety, and provider and work environment safety.
- Communicate in a manner that facilitates a partnership approach to quality care delivery; perform effectively in different team roles, using principles and values of team dynamics; and work with other professions to maintain a climate of mutual learning, respect, and shared values.
- Apply the complex interactions of various aspects of the healthcare system knowledge to optimize the system’s equity, value, quality and cost-effectiveness in the delivery of care.
- Incorporate information and healthcare technologies in the assessment, integration, delivery, and evaluation of patient care services at the individual and population levels.
- Model professional expectations for therapeutic relationships and practice in compliance with ethical comportments of nursing practice and relevant laws, policies, and regulations; assume accountability for practice to the individual, society, and the profession; and integrate diversity, equity, and inclusion as core to one’s professional identity.
- Engage in self-reflection that fosters personal health, resilience, well-being, and lifelong learning; provide leadership, mentorship, and advocacy to advance the nursing profession; and demonstrate cognitive flexibility in managing change in complex environments.

Psychiatric Mental Health Population Focus Practice Outcomes

- Perform a comprehensive psychiatric and mental health assessment and diagnostic evaluation, initiate and interpret relevant diagnostic tests and procedures, conduct multigenerational family assessments, and assess interactions among the individual, family, community, and social system’s relationship to mental health.
• Diagnose standard psychiatric and substance use diagnoses (e.g., DSM-V, IDC-10) through a systematic compare/contrast clinical reasoning process (differential diagnosis) of findings obtained through interviews, examination, and diagnostic procedures.
• Identify and develop client-centered goals and outcome expectations for the plan of care.
• Plan care to minimize complications and promote individualized recovery and optimal quality of life using evidence-based-treatment modalities including therapeutic communication, psychotherapy, and psychopharmacology.
• Evaluate the impact of psychiatric and mental health disorders on quality of life, physical and social health, and the impact of life stressors, traumatic events, and situational crisis on mental health.
• Provide health teaching (in individual or group settings) related to the client’s needs, recovery goals, and situation about topics related to - the diagnosis, treatment regimens, selection of a no-treatment option, coping skills, relapse prevention, self-care activities, resources, conflict management, problem-solving skills, stress management and relaxation techniques, and crisis management – as a strategy to promote health.
• Effectively engage in care coordination and communicate consultation recommendations that influence the identified plan, facilitate understanding by involved stakeholders, enhance the work of others, and effect change.
• Apply current research findings and knowledge to guide care and evaluate the individual’s response (interactive effects, therapeutic dose, untoward effects) related to pharmacology, other biological therapies and integrative therapies.
• Conduct individual, couples, group, and family psychotherapy using evidence-based psychotherapeutic frameworks and the nurse-client therapeutic relationship.

Didactic Course Waiver or Transfer Credit
The faculty in the DNP PMHNP Nurse Practitioner Program will review any requests for course waiver, or transfer of credit from other institutions, on a case-by-case basis. Tuition for the DNP PMHNP program is charged at a flat rate for full-time students, and therefore a course waiver will not alter the tuition paid by a full-time student.

Transfer Credit
Transfer credits will be reviewed on a case-by-case basis. For students who are not already licensed as Advanced Practice Registered Nurses (APRN), no more than three (3) courses (9QH) will be considered for transfer credits from outside RFUMS. Non-PMHNP APRNs may qualify for additional transfer credits. In order to be eligible for consideration, the following conditions must be met:

• Students wishing to obtain approval for transfer credits must submit their request after acceptance to the program, and before matriculation to the Administrative Director for the Department of Psychiatric Mental Health Nursing.

• Transfer credit will not be granted for DNP psychiatric mental health courses (NPMH 775-784), doctoral project courses, or any clinical practicum/seminar course.
• In addition to all other requirements outlined in this section, students seeking transfer credit for HNAS 725 Advanced Health Assessment will be required to successfully demonstrate the ability to perform a Head-to-Toe assessment, and conduct a comprehensive patient history.

• Students must submit a full syllabus and official transcript for the course(s) they are requesting to transfer. In each course, students must have obtained a final course grade of “B” or higher as verified by the transcript.

• The course director (for the course for which transfer credit is being requested) will review all documents to determine if the course is comparable in content and rigor to the DNP offering at RFUMS.

• If the course director approves the proposed course(s) for transfer, the forms are then submitted to the Chair of the Doctor of Nursing Practice program for final review and approval.

Program Degree Plan

Year 1 (53QH)
NDNP 725 Advanced Health Assessment (4QH)
NDNP 752 Advanced Physiology and Pathophysiology I (5QH)
NDNP 753 Advanced Pharmacology I (3QH)
NDNP 754 Advanced Physiology and Pathophysiology II (5QH)
NDNP 755 Advanced Pharmacology II (3QH)
NDNP 901 Translational Research I (3QH)
NDNP 902 Translational Research II (3QH)
NDNP 904 Entry-Level Doctoral Project Planning I (2QH)
NDNP 910 Health Policy, Economics and Finance (3QH)
NDNP 911 Professional Dissemination Skills (2QH)
NDNP 912 Leadership, Quality/Safety and Outcomes Management (3QH)
NDNX 529 Foundations of Interprofessional Practice (2QH)
NPMH 775 Neuro Anatomy and Physiology (4QH)
NPMH 776 Foundations in Assessment of Psychiatric Mental Health (4QH)
NPMH 777 Psychopharmacology I for the PMHNP (2QH)
NPMH 778 Psychotherapy I: A Review of Psychotherapies (3QH)
NPMH 914 Ethics and Legal Realities of Practice (2QH)

Year 2 (51QH)
NDNP 905 Entry-Level Doctoral Project Planning II (2QH)
NDNP 921 Entry-Level Doctoral Immersion Residency I (3QH)
NDNP 922 Entry-Level Doctoral Immersion Residency II (3QH)
NDNP 923 Entry-Level Doctoral Immersion Residency III (4QH)
NPMH 711 Clinical Correlations I (1QH)
NPMH 712 Clinical Correlations II (1QH)
NPMH 779 Foundations in the Diagnosis of Neuropsychiatric Disorders (5QH)
NPMH 780 Psychopharmacology II for the PMHNP (2QH)
NPMH 781 Psychotherapy II: Use of Psychotherapies for Treatment of Disorders (2QH)
NPMH 782 Assessment, Diagnosis, Management of Child and Adolescent Mental Health (4QH)
NPMH 783 Assessment, Diagnosis, Management of Addictive Disorders (3QH)
NPMH 784 Delivering Community Mental Health Services to the Vulnerable and Underserved (3QH)
NPMH 810 Clinical Residency I (9QH)
NPMH 820 Clinical Residency II (9QH)

Year 3 (33QH)
NDNP 931 Entry-Level Doctoral Project I (3QH)
NDNP 932 Entry-Level Doctoral Project II (3QH)
NPMH 830 Clinical Residency III (9QH)
NPMH 840 Clinical Residency IV (9QH)
NPMH 850 Clinical Residency V (9QH)

Assessment for Student Learning
Grading Policies
Student PMHNPs must achieve a grade of B or better in all PMHNP-centric graduate courses and must maintain a cumulative GPA of 3.0. Students falling below these standards will be placed on probation and may be subject to dismissal pending demonstration of successful remediation and competency attainment.

Student PMHNPs who do not meet established departmental grading requirements will be subject to dismissal pending due process as outlined in the CON Student Handbook.

Assessment of student learning is accomplished through the use of traditional examinations, oral presentations and examinations, written scholarly works and simulation experiences.

Grading for NPMH 711-712
Grading for NPMH 711-712 will be a Pass or Fail as described in the syllabus.

Grading for NPMH 810-850
Successful completion of any Clinical Residency course (NPMH 810-850) is contingent upon meeting expectations for all clinical residency objectives/performance indicators and completing/submitting required documents. Minimum requirements to receive a passing grade for each Clinical Residency course include:

- A Pass grade on diagnostic evaluations as determined by the PMHNP the course director (required number of diagnostic evaluations to be completed is also determined by the faculty mentor)
- Achievement of a minimum rating of “meets expectations” on all summative evaluation performance indicators for each residency
- Completion of an evaluation for each clinical site
- Completion of an evaluations for each clinical preceptor during each clinical residency.
Clinical coordinators may dismiss a student from the clinical area for violations of professional standards. Examples of such behavior include but are not limited to: failure to contact the clinical coordinator at least one week before the start of a rotation; failure to prepare for clinical assignment; inability to work effectively and safely with assigned clinical preceptors; failure to report to the clinical site or notify the clinical site/program office of absences per program policy; and patient safety violations. Clinical performance or behavior that represents violations of patient care standards, and/or poses a patient safety risk, will result in immediate removal of the student from the clinical rotation. Students may be assigned a failing grade and be subject to dismissal prior to completing the clinical residency due to:

- Egregious ethical violations
- Egregious patient safety violations that result in near misses or negative patient outcomes
- Failure to comply with patient management orders dictated by the supervising PMHNP or Psychiatrist.

The overall evaluation of a student’s clinical performance, and determination of a student’s grade for each residency, will be informed by:

- Formative evaluations
- Summative evaluation
- Clinical preceptor communications with program faculty
- Program faculty communications with the student
- Number and type of performance indicators that are below expectations
- Progress toward achievement of performance indicators
- Performance in the simulation lab

The program administrators have the right and responsibility to determine each student’s final grade. In accordance with the policies and procedures of the CON, and the Department of Psychiatric Mental Health Nursing, students receiving a failing grade of F in any Clinical Residency course are subject to dismissal from the program.

At the earliest indication that a student’s performance in the clinical area is unsatisfactory and inconsistent with the program standards, a meeting with the program administrators will be scheduled. The performance of such students will be reviewed and a course of action will be determined. Potential courses of action include but are not limited to (these courses of action may be concurrent, when applicable):

- Written warning, kept in the file of the involved student
- Remediation, which may include additional simulation lab testing and oral board exams
- Possible reorganization of clinical rotations for the affected student
- Extension of clinical residency training
- Conditional progression to the next clinical rotation. A grade of Incomplete will be posted in the transcript until successful achievement of a satisfactory evaluation from the clinical coordinator and successful achievement of “meets expectations” for all required clinical residency objectives/performance indicators
- Dismissal hearing
- Potential immediate withdrawal from the clinical rotation

**Graduation Requirements**

Students must meet the following program requirements:

- Total quarter hours required for degree: 137
- 1000 clock hours of clinical instruction
- Satisfactory completion of all program courses is required
- A minimum grade of B or better in all PMHNP-centric graduate courses
- A minimum grade-point average (GPA) of a 3.0 on a 4.0 scale in the program
- Successfully completion of a comprehensive examination in the final term of the program in preparation for the American Nurses Credentialing Center’s Board Certification Exam for Psychiatric Mental Health Nurse Practitioners
College of Pharmacy (COP)

Mission
To enhance patient and population health outcomes through excellence in interprofessional practice, education, research, and advocacy for the pharmacy profession.

Vision
To achieve national recognition for excellence and leadership in pharmacy and interprofessional healthcare education.

Program Accreditation
Rosalind Franklin University of Medicine and Science College of Pharmacy’s Doctor of Pharmacy program is accredited by:

Accreditation Council for Pharmacy Education
135 South LaSalle Street, Suite 4100
Chicago, IL 60503
312-664-3575
www.acpe-accredit.org

Programs of Study
Doctor of Pharmacy (PharmD)
Doctor of Pharmacy/Doctor of Philosophy (PharmD/PhD)

Doctor of Pharmacy (PharmD)

Program Introduction
- The typical length of time for degree completion is four academic years.
- The College of Pharmacy graduate is prepared to pass the North American Pharmacist Licensure Examination (NAPLEX), and to pursue any of the myriad of professional opportunities available to an individual with a Doctor of Pharmacy degree.
- The College of Pharmacy offers early clinical training and experiences, interprofessional education and a variety of simulation activities.

Admission Requirements
In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree**: A prior degree is NOT required.
- **Prerequisite Courses**: 65 semester hours or 95 quarter hours of pre-pharmacy, college-level coursework
  - General Biology with Lab – 6 SH or 9 QH
General Chemistry with Lab – 6 SH or 9 QH
Organic Chemistry with Lab – 6 SH or 9 QH
Microbiology – 3 SH or 4 QH
Anatomy, or Anatomy and Physiology with Lab* - 4 SH or 6 QH

*A Physiology course will not fulfill the Anatomy or Anatomy/Physiology with Lab requirement. The course must have an Anatomy component.

Calculus – 3 SH or 4 QH
Written Communication – 6 SH or 9 QH
Oral Communication – 3 SH or 4 QH
Statistics – 3 SH or 4 QH
Social/Behavior Science (for example, anthropology, economics, geography, political science, psychology or sociology) – 6 SH or 9 QH
Humanities (for example, art, art history, history, language, literature, music, philosophy, religious studies, theater or performance studies) – 6 SH or 9 QH
Electives (Spanish highly recommended) – 3 SH or 4 QH

Applicants must apply via the Pharmacy College Application Service (PharmCAS).

- **Grade-Point Average (GPA):** A cumulative GPA of 2.5/4.0 scale or higher and a science GPA of 2.5/4.0 scale or higher are competitive.
- **Tests:**
  - The Pharmacy College Admission Test (PCAT) is required for applicants with a total GPA of less than or equal to 2.5. Candidates with a GPA greater than 2.5 can make their application more competitive by providing PCAT results. Only scores from tests taken no more than three years prior to the enrollment year are accepted. There is no minimum PCAT; however, scores at or above the 55th percentile are most competitive.
  - The Test of English as a Foreign Language (TOEFL) and Test of Written English (TWE) are required for foreign applicants who are from countries where English is not the primary language and have not attended a United States university/college for two consecutive years.
- **Resume or Curriculum Vitae:** The PharmCAS system requests that applicants enter resume-type information.
- **Personal Statement:** A personal statement is required.
- **Supplemental Application:** A supplemental application is not required.
- **Transfer Applicant Policy:** This program does not accept transfer applicants.
- **Non-Degree Applicant Policy:** This program does not have a non-degree applicant policy.
- **Early Decision Programs:** This program does not accept early decision applicants.
- **Letters of Recommendation:** Either two individual letters of recommendation or one committee letter is required.
  - The College of Pharmacy prefers to receive two letters of recommendation from individual members of the faculty (preferably science), employers, supervisors or pharmacy professionals.
Letters from additional health professionals, personal references or other recommendations may be submitted in addition to the academic evaluations at the applicant’s option.

All letters must be sent directly to the PharmCAS service. Strongly encourage your evaluators to send electronic letters of reference (eLOR) to PharmCAS. Read the PharmCAS reference section for eLOR instructions. If the evaluator plans to send a paper reference, the application must print the PharmCAS reference request form.

Technical Standards
A candidate for the PharmD degree must possess abilities and skills which include those that are observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social. Technological and other means to facilitate these abilities and skills can be made for certain limitations, however, the candidate should be able to perform independently in most situations. The College of Pharmacy is committed to ensuring student success by any reasonable means or accommodations to complete the Doctor of Pharmacy program.

- **Observation:** The candidate must be able to acquire a defined level of required information as presented through demonstrations and experiences in the basic and clinical sciences, including, but not limited to, information conveyed through physiologic and pharmacological images and demonstrations. Furthermore, a candidate must be able to:
  - Observe and evaluate a patient accurately, at a distance and close at hand, with or without standard medical instrumentation, to acquire information from written documents, and visualize information as presented in images from paper, films, slides or video. Observation and evaluation require the functional use of visual and auditory as well as somatic senses.
  - Integrate graphic images and digital or analog representations of physiologic phenomenon with or without the use of assistive devices.

- **Communication:** A candidate must be able to elicit information, describe changes in mood, activity and posture, and perceive non-verbal communications. A candidate must be able to communicate effectively and sensitively with patients and their families. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the healthcare team, which includes settings in which rapid decisions must be made.

- **Motor:** It is required that a candidate possess the motor skills necessary to perform basic physical assessment procedures, medication administration, medication preparation and to utilize laboratory and diagnostic equipment. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize information and concepts. In addition, the candidate must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Problem-solving,
the critical skill demanded of pharmacists, requires all of these intellectual abilities. The candidate must be able to perform these problem-solving skills in a timely fashion.

- **Behavioral and Social Attributes:** The candidate must possess the emotional capacities required for full utilization of their intellectual abilities and accept responsibility for learning. This includes the exercise of good judgment, the prompt completion of all responsibilities attendant to the care of patients, and the development of mature, sensitive and effective relationships.

The candidate must be able to work collaboratively, accept constructive feedback, display flexibility, adapt to changing environments, and function effectively under stress.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Credits and Advanced Standing**
No transfer credits or advanced standing will be awarded regardless of previous experience.

**Core Competencies**
Upon completion of the PharmD degree, the student will be prepared to:

- Demonstrate scientific and pharmaceutical knowledge
- Continue the practice of lifelong learning
- Participate in interprofessional activities
- Utilize effective communication skills
- Employ pharmacy practice skills
- Emulate professionalism
- Assume leadership responsibilities
- Maintain self-awareness

**Program Degree Plan**

**Year 1 (51QH)**
YPHP 500 Introduction to Pharmacy Practice (1QH)
YPHP 502 Introduction to Drug Information Resources (1QH)
YPHP 505 Research and Statistics (2QH)
YPHP 506 Pharmacy Skills Lab I (3QH)
YPHP 507 Pharmacy Skills Lab II (3QH)
YPHP 508 Pharmacy Skills Lab III (2QH)
YPHP 510 Self-Care and Non-Prescription Medications (3QH)
YPHP 511 Pharmacy-Based Immunization Delivery (1QH)
YPHP 515 Introductory Pharmacy Practice Experience (6QH)
YPHP 519 Pathophysiology I (2QH)
YPHP 520 Pathophysiology II (2QH)
YPHS 501 Pharmaceutics I: Introduction to Pharmaceutical Sciences (3QH)
YPHS 502 Pharmaceutics II: Dosage Forms (2QH)
YPHS 503 Pharmaceutical Calculations (3QH)
YPHS 504 Biochemical Principles for Pharmacy I (2QH)
YPHS 506 Medicinal Chemistry (2QH)
YPHS 510 Fundamentals in Physiology I (4QH)
YPHS 511 Fundamentals in Physiology II (3QH)
YPHS 512 Biochemical Principles for Pharmacy II (2QH)
YPHS 514 Fundamentals of Pharmacology (2QH)
YPHX 529 Foundations for Interprofessional Practice (2QH)

**Year 2 (53QH)**
YPHP 504 Health Care Systems (2QH)
YPHP 604 Clinical Pharmacokinetics and Pharmacodynamics (2QH)
YPHP 606 Pharmacy Skills Lab IV (3QH)
YPHP 607 Pharmacy Skills Lab V (3QH)
YPHP 608 Pharmacy Skills Lab VI (3QH)
YPHP 615 Introductory Pharmacy Practice Experience (5QH)
YPHP 620 Pharmacotherapy I (4QH)
YPHP 621 Pharmacotherapy II (4QH)
YPHP 622 Pharmacotherapy III (4QH)
YPHP 630 Gateway to Patient-Centered Care (1QH)
YPHP 631 Literature Evaluation and Advanced Drug Information (3QH)
YPHP 632 Pharmacoepidemiology (1QH)
YPHS 509 Pharmaceutical Non-Sterile Compounding (1QH)
YPHS 600 Basic Pharmacokinetics and Pharmacodynamics (3QH)
YPHS 610 Advanced Medicinal Chemistry I (1.5QH)
YPHS 611 Advanced Medicinal Chemistry II (1.5QH)
YPHS 612 Advanced Medicinal Chemistry III (1QH)
YPHS 620 Life-Long Learning Seminar (1QH)
YPHS 625 Pharmacology I (2.5QH)
YPHS 626 Pharmacology II (2QH)
YPHS 627 Pharmacology III (2.5QH)
YPHX 566 Bioethics (2QH)

**Year 3 (39.5QH)**
YPHP 703 Pharmacy Management and Leadership (2QH)
YPHP 706 Pharmacy Skills Lab VII (2QH)
YPHP 707 Pharmacy Skills Lab VIII (2QH)
YPHP 708 Pharmacy Skills Lab IX (1QH)
YPHP 709 Health Care and Pharmacy Law (3QH)
YPHP 710 Pharmacotherapy IV (3QH)
YPHP 711 Pharmacotherapy V (4QH)
YPHP 712 Pharmacotherapy VI (3QH)
YPHP 713 Pharmacogenomics (2QH)
YPHP 714 Pharmacoeconomics (2QH)
YPHP 715 Introductory Pharmacy Practice Experience (3.5QH)
YPHP 716 Interprofessional Case Collaborations (3QH)
YPHP 719 Gateway to Clinical Practice (2QH)
YPHS 720 Life-Long Learning Seminar (1QH)
Electives (6QH)

**Year 4 (58QH)**
YPHP 800 Practical Approaches to Professional Development (4QH)
YPHP 801 Advanced Pharmacy Practice Experience – Acute Care (9QH)
YPHP 802 Advanced Pharmacy Practice Experience – Ambulatory Care (9QH)
YPHP 803 Advanced Pharmacy Practice Experience – Community Pharmacy (9QH)
YPHP 804 Advanced Pharmacy Practice Experience – Health-Systems (9QH)
*and two electives (18QH total) from one or both of the following:*
YPHP 805 Advanced Pharmacy Practice Experience – Patient Care Elective (9QH)
YPHP 806 Advanced Pharmacy Practice Experience – Non-Patient Care Elective (9QH)

**Assessment for Student Learning**

**Grading System**

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<tr>
<td>B</td>
<td>3.00</td>
<td>Above Average Achievement</td>
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<tr>
<td>C</td>
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<td>Average Achievement</td>
</tr>
<tr>
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<td>Failure</td>
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*Grades without Associated Grade Points:*

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<td>Pass</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
</tr>
</tbody>
</table>

**Assessment Methods**

Assessment methods can be either formative or summative and may include exams, quizzes, homework, team-based problem-solving, group projects, peer evaluation, case studies, presentations, practical exams, term papers, reflections, simulations and/or preceptor observations.

**Graduation Requirements**

Students must meet the following program requirements:

- Successful completion of a minimum of 201.5 quarter hours
- P1–P3 years: 143.5 quarter hours of required courses, which includes 6 quarter hours of didactic electives
- P4 year: 58 quarter hours of Advanced Pharmacy Practice Experience coursework

- If there is a delay in progression, the didactic and experiential requirements must be competed and the student must be eligible to earn the PharmD degree within 7 consecutive calendar years from the date of enrollment or be subject to dismissal.
- Successful completion of course requirements within seven calendar years including academic and personal leave.
- No minimum GPA is required for graduation.
Dr. William M. Scholl College of Podiatric Medicine (SCPM)

Mission
To educate podiatric medical students in an interprofessional environment that emphasizes excellence in academics, patient care, and research, in preparation for residency training.

Vision
To be the leader in the education of podiatric medical students, curricular development, research in lower extremity health, and service to the community.

Program Accreditation
The Dr. William M. Scholl College of Podiatric Medicine at Rosalind Franklin University of Medicine and Science is accredited by the Council on Podiatric Medical Education. Accreditation is an indication of public approbation, attesting to the quality of the podiatric medical education program and the continued commitment of the institution to support the educational program. The council is recognized as the professional institutional accrediting agency for podiatric medical education by the U.S. Department of Education and by the Council for Higher Education Accreditation.

For further information, please contact the Council on Podiatric Medical Education at the following address:

Council on Podiatric Medical Education
9312 Old Georgetown Road
Bethesda, MD 20814
301-571-9200

Programs of Study
Doctor of Podiatric Medicine (DPM)
Doctor of Podiatric Medicine/Doctor of Philosophy (DPM/PhD)
Bachelor of Science in Biological Sciences (BS)

Doctor of Podiatric Medicine (DPM)

Program Introduction
Completion of the program normally requires four years, with a maximum of six years allowed.

Doctors of Podiatric Medicine (DPMs), also known as podiatrists, are podiatric physicians and surgeons qualified by their education and training to diagnose and treat conditions affecting the foot, ankle and related structures of the leg. Podiatrists are uniquely qualified among medical professionals to treat the foot and ankle based on their education, training and experience. To
accomplish these tasks and attain a high level of professional competence, the podiatric physician must:

- Assimilate a large number of anatomic, biologic and physiologic concepts and principles, and use them in assessment, diagnosis and treatment of patient conditions and diseases.
  - Employ critical thinking and problem-solving skills.
  - Correctly interpret the appropriate medical literature pertaining to each patient’s condition(s).
  - Communicate with other healthcare providers to contribute to a team approach for total patient care.
- Develop knowledge and proficiencies in diagnosis and evaluation of the overall health status of children and adults, leading to a determination regarding the relationship of the patient’s health to pathology in the lower extremity.
  - Interpret diagnostic tests, interpret radiographs and other imaging modalities.
  - Communicate with other healthcare providers to contribute to a team approach for total patient care.
- Engage in effective communication with patients, including speaking and listening skills and the ability to express and interpret body language appropriately.
- Treat patients’ conditions and diseases through medical, surgical, biomechanical and palliative means.
  - Have direct physical contact and interaction with patients.
  - Use sharp instruments in the treatment of patients on a daily basis. Common procedures would include, but are not limited to, skin and nail debridement, skin and nail excision, as well as invasive and exposure-prone procedures such as soft tissue and osseous tissue surgical intervention.
  - Have direct contact with human tissue and blood.
  - Inject medications. Common injection procedures would include, but are not limited to, local anesthesia, nerve blocks; aspiration of joints, tendons and bursae; and infiltration of joints, tendons and bursae with anti-inflammatory agents.
  - Employ a team approach to treatment of the whole patient and the patient’s family.
- Develop advanced fine and gross motor skill abilities, used in the direct physical treatment of patients.
  - Have direct physical contact and interaction with patients.
  - Have direct contact with human tissue and blood.
  - Inject medications and perform aspiration. Common injection procedures would include, but are not limited to, local anesthesia, nerve blocks, and infiltration/aspiration of joints, tendons, and bursae.
- Perform procedures that may expose the healthcare provider, patient or student to risk of infection.
  - Use sharp instruments in treatment of patients on a daily basis. Common procedures would include, but are not limited to, invasive and exposure-prone
procedures, such as soft tissue and osseous tissue surgical intervention as well as skin and nail excision and debridement.

- Treat patients in accord with the ethical standards of the profession.
- Maintain confidentiality related to the patient and the patient’s condition(s).

Curriculum
The four-year curriculum at Scholl College is composed of Basic Biomedical (Preclinical) and Clinical Science coursework, clinical experiences and clerkships.

The Basic Biomedical Science and most of the Clinical Science didactic coursework are taught in the first two years.

- The first-year courses are taught as modules of varying length allowing final examinations to be staggered rather than concentrated into one final exam week.
- During the second year, the Podiatric Clinical Skills and Reasoning II Workshop and Clinic consists of clinical laboratory skills, anesthesia administration, clinical problem-solving activities and closely supervised patient care.
- The first part of the third year consists of the Capstone Clinical Experiences in Podiatric Medicine, Podiatric Orthopedics, Podiatric Radiology and Podiatric Surgery.
  - During the Capstone Clinical Experiences students also participate in Podiatric Clinical Skills and Reasoning III-Clinic, Community Health, Ethics and Professional Responsibility, Lower Extremity Traumatology and Peripheral Vascular Diseases.
  - During the last two months of the capstones, all students complete the practical portion of the Clinical Competency Examination.
- The remainder of the third year is spent in core and elective clerkships.
- Students spend the fourth year participating in core and elective clerkships at academic health science centers and community hospitals, at local area clinical facilities and at other affiliated programs outside the Chicago area.
- In addition, students participate in virtual review lectures in preparation for the APMLE Part II written examination and mock interviews. The students are also required to pass a Clinical Competency Examination (CCE) during the fourth year.
- The students participate in residency interviews, including the Centralized Residency Interview Program (CRIP), and take the APLME Part II written examination during the month of January.

Admission Requirements
Scholl College enrolls students who present evidence of strong preparation for the study of Doctor of Podiatric Medicine (DPM). In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree:** The majority of entering DPM students possess a bachelor’s or advanced degree.
• **Prerequisite Courses:**
  - A candidate’s academic credentials must include successful completion of 90 semester credit hours (135 quarter hours) of coursework at an accredited college or university prior to enrollment.
  - The following minimum requirements must also be met:
    - 12 semester hours (18 quarter hours) of biology
    - 8 semester hours (12 quarter hours) each of organic chemistry, general or inorganic chemistry and physics
    - 6 semester hours (9 quarter hours) of English
  - All science courses must include lab work where applicable. Biochemistry may be substituted for half the organic chemistry requirement. Biochemistry and microbiology undergraduate coursework are not prerequisites for admission, but completion of these courses may be of benefit to the student in the first year.

• **Tests:**
  - All candidates for admission are required to complete the Medical College Admission Test (MCAT) prior to enrollment. Candidates seeking admission to Scholl College are strongly encouraged to complete the MCAT prior to applying.
  - Applicants who plan to complete the MCAT in the winter or spring should submit an application prior to taking the test, so that admission evaluation is not delayed.
  - Scholl College will not offer acceptances to candidates who have pending MCAT scores, have a test date scheduled or have not released their scores. Interviewed applicants will have their file placed on hold until official MCAT scores are received by the American Association of Colleges of Podiatric Medicine Application Service (AACPMAS).

• **Letters of Recommendation:** The Admissions Committee desires one letter from a Doctor of Podiatric Medicine (DPM) confirming shadowing experience. The letter is required and must be received by the time of matriculation. Applications are encouraged to have either one composite letter of recommendation or one letter of recommendation from a faculty member, preferably a science faculty member by the time of matriculation. For applicants currently pursuing or who have completed an advanced degree (MS, PhD, etc.), the Admissions Committee prefers that the letter of recommendation come from the advisor or program director.

• A personal interview with members of the Admissions Committee is required of all candidates who are being seriously considered for admission and is at the invitation of the college.

• **Resume or Curriculum Vitae:** This is included in the application.

• **Personal Statement:** This is included in the application.

**Technical Standards**

All applicants and students are expected to meet certain technical standards for advancement and graduation. These standards are set forth herein. In adopting these standards, the college keeps in mind the ultimate safety of its students and graduates, as well as the patients they treat. The
standards reflect reasonable expectations of qualified podiatric medical students (and physicians) performing essential/required functions. Use of a trained intermediary is not acceptable.

- **Visual Observation:** Candidates and students must have sufficient vision to be able to observe demonstrations, experiments and laboratory exercises in the basic sciences and performance of podiatric tasks during clinical rotations. They must be able to observe a patient accurately at a distance and close at hand. Examples of courses and clinical experiences for which visual observation is required include, but are not limited to, the following: Clinical Anatomy, Lower Extremity and Neuroscience courses, Pathology, Structure and Function, Microbiology, Essentials of Clinical Reasoning, Dermatology, Radiology, Podiatric Medicine, Podiatric Surgery, and Biomechanics.

- **Communication:** Candidates and students should be able to speak, hear and observe in order to elicit information, examine patients, describe changes in mood, activity and posture, and perceive non-verbal communications. They must be able to communicate effectively and sensitively with patients. Communication includes not only speech but also reading and writing. They also must be able to communicate effectively and efficiently in oral and written form with all members of the healthcare team. Examples of courses and clinical experiences for which communication is required include, but are not limited to, the following: all podiatric and medical clinical experiences; clinical courses in radiology, podiatric medicine, podiatric surgery, biomechanics, and general internal medicine; and physiology, lower extremity anatomy, pathology and pharmacology.

- **Motor:** Candidates and students should have sufficient motor function to execute movements reasonably required to provide general care and emergency treatment to patients. Examples of common daily treatments include palliative care of foot conditions, injection of medications such as anesthetics and anti-inflammatory medications, orthotic impressions, taking and processing of pedal radiographs, and performance of foot and ankle surgeries that include soft tissue and osseous tissue invasive and exposure-prone procedures. Examples of emergency treatment reasonably required of physicians are cardiopulmonary resuscitation, administration of intravenous medication, the application of pressure to stop bleeding, the opening of obstructed airways and the suturing of simple wounds. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision. Examples of courses and clinical experiences for which motor skills and abilities are required include, but are not limited to, the following: Structure and Function, Podiatric Clinical Skills and Reasoning, Podiatric Surgery, Biomechanics, Podiatric Medicine, Podiatric Radiology and clerkships.

- **Sensory:** Because podiatric medical treatment requires enhanced ability in all sensory skills, including smell, it would be necessary to thoroughly evaluate for candidacy individuals who are otherwise qualified but who have significant tactile sensory or proprioceptive disabilities. This would include individuals with significant previous burns, sensory motor deficits, cicatrix formation and limiting malformations of the upper extremities that prevent performance of essential podiatric tasks, including fulfillment of student clinical requirements. Examples of courses and clinical experiences for which
sensory skills are required include, but are not limited to, the following: all clinical experiences including Essentials of Clinical Reasoning.

- **Strength and Mobility:** Because podiatric medical treatment requires sufficient upper extremity strength and mobility, it would be necessary to thoroughly evaluate for candidacy individuals who are otherwise qualified but who have significant strength and mobility disabilities. Mobility to attend in emergency codes and to perform such maneuvers as CPR are also required. Examples of courses and clinical experiences for which strength and mobility are required include, but are not limited to, the following: CPR, Podiatric Surgery and Podiatric Clinical Skills and Reasoning.

- **Visual Integration:** Consistent with the ability to assess symmetry, range of motion and tissue texture changes, it is necessary to have adequate visual capabilities for proper evaluation and treatment integration. Examples of courses and clinical experiences for which visual integration is required include, but are not limited to, the following: all clinical experiences, courses in Structure and Function, Pathology, Dermatology, Radiology, Surgery, Biomechanics, Sports Medicine and Pediatric Orthopedics.

- **Intellectual, Conceptual, Integrative and Quantitative Abilities:** These abilities include measurement, calculation, reasoning, analysis and synthesis. Problem-solving, the critical skill demanded of physicians, requires all of these intellectual abilities. In addition, candidates and students should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Examples of courses and clinical experiences for which intellectual, conceptual, integrative and quantitative abilities are required include, but are not limited to, the following: courses in Structure and Function, Pharmacology, Biochemistry and all clinical courses and experiences.

- **Behavioral and Social Attributes:** Candidates and students must possess the emotional health, stability and maturity required for full utilization of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients and other members of the healthcare team. Candidates and students must be able to tolerate physically-taxing workloads, adapt to changing environments and varying personalities, display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that will be assessed during the admissions and educational processes. Examples of courses and clinical experiences for which behavioral and social attributes are required include, but are not limited to, the following: all courses with laboratory sessions; all clinical experiences.

- **Abilities to be Involved in Invasive and Exposure-Prone Procedures:** Candidates and students must be qualified to be personally and actively involved in invasive and exposure-prone procedures, without being a danger to patients, other health professionals and fellow students, while adhering to universal precautions as defined by the Centers for Disease Control and Prevention. Common procedures would include, but are not limited to, skin and nail debridement, skin and nail excision, as well as invasive and exposure-
prone procedures such as soft tissue and osseous tissue surgical intervention. Examples of courses and clinical experiences for which abilities to be actively and personally involved in invasive and exposure-prone procedures are required include, but are not limited to, the following: general podiatric medicine, general internal medicine and general surgery, biomechanics and podiatric surgical clinical experiences.

Transfer Applicant Policy
Transfer applications will be considered from students who are currently enrolled in good standing at, or who were previously enrolled in and in good standing at, a U.S. college of podiatric medicine.

Transfer applicants must submit the AACPMAS application and include all application materials required of first-year applicants. Transfer applicants will follow the process for which first-time applicants are reviewed for admissions. Transfer students must also have earned a GPA of at least 3.0 on a 4.0 scale. Transfer applicants must submit a letter of good standing from the dean or other appropriate official of the school from which the applicant wishes to transfer.

Transfer students will have their placement and standing determined after the official notification of admission and deposit has been received. In no case may a transfer student register for classes prior to official notification of placement and standing.

Request for transfer credit will be evaluated by the course director of the requested course, in consultation with the department chair. At the recommendation of the department chair, transfer students may be required to sit for a proficiency examination in order to receive transfer credit for certain courses or a certain number of credit hours. All proficiency exams must be completed at least two weeks prior to the start of classes for the next academic year.

Core Competencies
• Domain I: Medical Knowledge
  o Competency Statement: Apply current and emerging knowledge of human structure, function development, pathology, pathophysiology, and psychosocial development to patient care. The knowledge obtained provides a foundation in clinical training, residency training, and practice in podiatric medicine.
  o 1. Describe normal development, structure, and function of the body with emphasis on the lower extremities.
  o 2. Explain the genetic, molecular, biochemical and cellular mechanisms important to maintaining the body’s homeostasis.
  o 3. Relate the altered development, structure, and function of the body and its major organ systems to diseases and pathological conditions with emphasis on the lower extremity.
  o 4. Apply knowledge from pre-clinical and clinical sciences, including knowledge of pharmacology, microbiology, and immunology in simulated and clinical settings to patient care.
5. Use current and emerging knowledge of health and disease to identify and solve problems in patient care.

- Domain II: Patient Care
  - Competency Statement: Provide effective and compassionate patient-centered care (with emphasis on the lower extremity) that promotes overall health to diverse populations. Exhibit cultural awareness to ensure that patients and their families are provided the highest quality of care that demonstrates respect for diverse cultures.
  - 1. Apply medical knowledge to distinguish between wellness and disease.
  - 2. Perform and interpret comprehensive and problem-focused histories and physical examinations.
  - 3. Perform lower-extremity exams required for the diagnosis and management of disorders and conditions.
  - 4. Formulate a prioritized differential diagnosis based on chief complaint, history, physical examination, and clinical assessments.
  - 5. Perform and/or interpret clinical, laboratory, imaging, gait and biomechanical analyses, and other diagnostic studies required for management and treatment.
  - 6. Participate actively in the performance of treatment techniques using medical and surgical means.
  - 7. Recommend referrals of patients ensuring continuity of care throughout transitions between providers or settings, and determining patient progress.
  - 9. Recognize patients with life-threatening emergencies and institute initial therapy.
  - 10. Demonstrate knowledge of public health, health promotion, disease prevention, and clinical epidemiology.
  - 11. Recognize evidence of mental or physical impairment of oneself or others in order to protect patients from harm.
  - 12. Formulate strategies of pain management that minimize the occurrence of substance abuse, including, but not limited to, the use of opioids.
  - 13. Demonstrate awareness of issues related to culture, religion, age, gender, sexual orientation, and mental and physical disabilities.
  - 14. Engage patients and their families in shared decision-making through counseling and education.
  - 15. Use information technology to access online medical information, manage information, and assimilate evidence from scientific studies to patient care.

- Domain III: Research and Scholarship
  - Competency Statement: Apply scientific methods and utilize clinical and translational research to further the understanding of contemporary podiatric medicine and its application to patient care.
  - 1. Identify responsible practices and ethical behaviors used in research.
2. Retrieve and interpret medical and scientific literature.
3. Apply knowledge of the principles of research methodology and its relevance for clinical decision making.
4. Investigate opportunities that enhance life-long learning and contribute to the body of knowledge in podiatric medical research and scholarship.

- Domain IV: Interpersonal and Interprofessional Communication
  - Competency Statement: Demonstrate communication and interpersonal skills that result in relevant and professional information exchange and decision-making with patients, their families, and members of the health-care team.
  1. Communicate effectively utilizing oral, digital, and written formats.
  2. Communicate effectively (including non-verbal cues) with patients, families, and other health-care professionals, especially when special barriers to communication exist.
  3. Interact appropriately with peers, faculty, staff, and health-care professionals in academic and health-care settings.
  4. Exhibit behavior that demonstrates the capacity to establish a doctor/patient relationship.

- Domain V: Professionalism
  - Competency Statement: Exhibit the highest standards of competence, ethics, integrity, and accountability. Places the patient’s interest above oneself.
  1. Apply theories and principles that govern ethical decision-making to the practice of medicine and research.
  2. Recognize potential conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine, in medical education and research.
  3. Practice the standards that ensure patient privacy and confidentiality.
  4. Demonstrate dependability, commitment, and reliability in interactions with patients and their families and other health-care professionals.
  5. Recognize, and address in a constructive manner, unprofessional behaviors in oneself and others with whom one interacts.
  6. Demonstrate personal behaviors that promote patient safety and infection control and prevent medical errors.
  7. Identify personal deficiencies in knowledge and skills, and address them by implementing methods for improvement.
  8. Employ strategies for seeking and incorporating feedback from patients, peers, and other health-care professionals to improve personal and patient outcomes.
  9. Demonstrate knowledge of state and federal laws governing the practice of the profession.
  10. Demonstrate knowledge of the principles of bioethics including customary and accepted standards of professional practice.
  11. Demonstrate knowledge of health-care insurance products, third-party reimbursements, and jurisprudence.
• Domain VI: Interprofessional Collaborative Practice
  o Competency Statement: Demonstrate the ability to work as an effective member of a health-care team.
  o 1. Values/Ethics for Interprofessional Practice: work with individuals of other professions to maintain a climate of mutual respect and shared values.
  o 2. Perform effectively in diverse health-care delivery settings and systems.
  o 3. Describe the structure and function of health-care delivery and payer systems used in the United States.
  o 4. Roles/Responsibilities: use the knowledge of one’s own role and the roles of other professions to appropriately assess and address the health care needs of patients and populations served.
  o 5. Interprofessional Communication: communicate with patients, families, communities, and other health professionals in a responsive and responsible manner that supports a team approach to maintaining health and treatment of disease.
  o 6. Identify resources for patients in situations in which social and economic barriers limit access to affordable health care and information.
  o 7. Teams and Teamwork: apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan and deliver patient/population-centered care that is safe, timely, effective, and equitable.
• Domain VII: Social Determinants of Health and Addiction
  o Competency Statement: Demonstrate an understanding of common society problems (e.g., issues of addiction or abuse) and their impact on patients and their families.
  o 1. Demonstrate an understanding of the development and maintenance of substance abuse and its impact on a community as well as how social determinants affect substance-related disorders.
  o 2. Evaluate the social determinants of health of individuals, identify which determinants are potentially modifiable and formulate strategies to improve patient care.

Program Degree Plan

Year 1 (68QH)
PAPB 501 Understanding and Implementing Clinical Research (2QH)
PAPB 502 Biomechanics (6QH)
PBBS 500 Clinical Anatomy (9QH)
PBBS 503 Structure and Function (11QH)
PBBS 504 Neuroscience (5QH)
PBBS 505 Microbiology and Immunology (7QH)
PBBS 506 Lower Extremity Anatomy (8QH)
PBBS 508 Biochemistry and Genetics (5QH)
PMED 502 Podiatric Medicine and Surgery (3.5QH)
PMED 503 Podiatric Clinical Skills and Reasoning I (2QH)
PODX 529 Foundations for Interprofessional Practice (2QH)
PODX 564 Essentials of Clinical Reasoning I (7.5QH)

Year 2 (68.5QH)
POPB 604 Orthotic Laboratory Workshop (0.5QH)
POPB 605 Sports Medicine (3QH)
POPB 606 Pediatric Orthopedics (4QH)
PBBS 601 Pharmacology (8.5QH)
PBBS 602 Pathology (10.5QH)
PDPM 600 Basic Biomedical Science Comprehensive Exam (2QH)
PMED 603 Dermatology (2.5QH)
PMED 605 Podiatric Clinical Skills and Reasoning II – Workshop (4QH)
PMED 606 Podiatric Clinical Skills and Reasoning II – Clinic (4QH)
PMED 608 Medicine (8QH)
PODX 665 Essentials of Clinical Reasoning II (5.5QH)
PRAD 602 Podiatric Radiology (6QH)
PSUR 602 General Surgical Principles and Anesthesiology (10QH)

Year 3 (42.5QH)
POPB 705 Podiatric Orthopedics Capstone Clinical Experience – Workshop (6QH)
PMED 702 Peripheral Vascular Diseases (1.5QH)
PMED 707 Podiatric Medicine Capstone Clinical Experience – Workshop (8.5QH)
PMED 708 Podiatric Clinical Skills and Reasoning III – Clinic (7QH)
PMED 709 Community Health, Ethics and Professional Responsibility (3QH)
PRAD 702 Podiatric Radiology Capstone Clinical Experience – Workshop (9QH)
PSUR 704 Podiatric Surgery Capstone Clinical Experience – Workshop (5.5QH)
PSUR 706 Lower Extremity Traumatology (2QH)

Year 4 (59QH)
PACE 801 Stroger (Cook County) Hospital Core Podiatry Clerkship (8QH)
PACE 802 James A. Lovell Federal Health Care Center Core Podiatry Clerkship (8QH)
PACE 803 Jesse Brown VA Core Podiatry Clerkship (8QH)
PACE 804 Hines VA Core Podiatry Clerkship (8QH)
PACE 806 Scholl College of Podiatric Medicine Clerkship (2QH)
PDPM 800 Clinical Competency Exam (1QH)
PMED 801 Internal Medicine Clerkship (8QH)
PMED 802 Emergency Medicine Clerkship (8QH)
PSUR 802 General Surgery Clerkship (8QH)

PELE 700 & PELE 800 Third and Fourth Year Electives (56QH)
Bachelor of Science in Biological Sciences (BS)
The Dr. William M. Scholl College of Podiatric Medicine at Rosalind Franklin University of Medicine and Science offers the degree of Bachelor of Science in Biological Sciences, which is issued upon successful completion of the Basic Science courses of the PM1 year to students who have fulfilled the General Education requirements as indicated below. The Bachelor of Science degree is therefore normally issued during the second year for enrolled students who have fulfilled the degree requirements or during what would have been the student’s second year for students meeting the degree requirements who no longer are enrolled.

Undergraduate Coursework
The following coursework with a total of 135 transfer quarter hours from an accredited undergraduate institution is required to earn the BS:

- 18 QH (at least 12 QH in Humanities) from:
  - Humanities including:
    - English
    - Humanities
    - Foreign Language and Literature
    - Linguistics
    - Philosophy
    - Speech
    - Women’s Studies
  - Fine Arts including:
    - Art
    - Music
    - Performing Arts

- 18 QH from:
  - Behavioral/Social Sciences including:
    - Anthropology
    - Economics
    - Geography
    - History
    - Political Science
    - Psychology
    - Sociology

- 58.5 QH from:
  - Natural/Physical Sciences (All with a laboratory component):
    - Biology: 18 QH
    - Inorganic Chemistry: 12 QH
    - Organic Chemistry: 12 QH
    - Physics: 12 QH
    - Mathematics (Math, Statistics, Calculus, etc.): 4.5 QH
• 40.5 QH from Miscellaneous Elective Courses

Courses for the Biology Major

1st Year Courses, 45 QH of which count for Biology major. All of these must be taken at Scholl College:

PBBS 500A, B & C Clinical Anatomy (9 QH)
PBBS 503A & B Structure and Function (11 QH)
PBBS 504 Neuroscience (5 QH)
PBBS 505A & B Microbiology and Immunology (7 QH)
PBBS 506A & B Lower Extremity Anatomy (8 QH)
PBBS 508 Biochemistry and Genetics (5 QH)

Scholl College hours: 45 QH Total Hours: 180 QH

Additional Requirements for the Bachelor of Science Degree

• Satisfactory completion of at least 45 QH of Basic Biomedical Science courses from the PM1 year at Scholl College that will constitute the degree major.
• Minimum PM1 year grade-point average of 2.0 on a 4.0 scale and be in good academic standing at the conclusion of the first year at Scholl College.
• In addition to the above requirements, the Bachelor of Science recipient must have completed a minimum of 135 QH hours of accredited college work of which at least 45 QH must be at senior college level in addition to those hours taken at Scholl College. These 135 QH of accredited college work must meet General Education requirements as stipulated above.
• (Students already holding a bachelor’s degree in Biology or Biological Sciences are not eligible to receive the BS degree in Biological Sciences from Scholl College).
• Students must formally apply to the Office of the Registrar for the bachelor’s degree and pay any required fee.
• Not more than 90 QH from an accredited two-year institution will be accepted toward the BS degree.

Assessment for Student Learning

Grading System

A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:

P  Pass
F  Fail
For the Capstone Clinical Experience, the grading scale varies depending on the capstone, but is generally an A, B, F scale.

Assessment Methods

Depending on the course or clinical experience, students may be assessed in any and all of the following methods: multiple-choice exam, fill-in-the-blank exam, short answer questions, essay, lab exam, lab reports, quizzes, practical examinations, simulations, preceptor observations, group projects, case studies and oral presentation.

Graduation Requirements

The degree of Doctor of Podiatric Medicine (DPM) is conferred upon students who have successfully completed the following:

- Passed all 294 hours of instruction in didactic and clinical courses.
- Satisfactorily completed the DPM curriculum as prescribed by the college.
- American Podiatric Medical Licensing Examination (APMLE)
  - Taken the Part I and Part II (both written and CSPE, if offered) examinations on the first date they are offered.
  - Passed Part I
  - Reported Part I, Part II and the Part II CSPE (if offered) scores to the dean. In order to be eligible for residency placement, students must pass the APMLE, Parts I, Part II written and Part II CSPE (if offered). However, passage of these examinations does not guarantee placement into a residency. (For more information on the board examinations, see http://apmle.com)
- Basic Biomedical Sciences Pre-Assessment and Comprehensive Examinations:
  - Taken both exams
- Clinical Comprehensive Examination (CCE)
  - Taken the CCE on the first offering
  - Passed the CCE
- Completed the Fourth Year Curriculum Survey and the Student Services Survey.
- Complied with all requirements and policies enacted by the college.
- Provided post-graduate training placement information to the Scholl College Clerkship and Residency Placement Office.

A student admitted to the Dr. William M. Scholl College of Podiatric Medicine is expected to graduate in four academic years. The four academic years will be consecutive except in cases of approved leaves of absence. All didactic course and clinical experience/ clerkship requirements must be successfully completed before promotion to the next academic year can occur.

Students must complete the academic and clinical requirements and be eligible to earn their Doctor of Podiatric Medicine degree within six consecutive calendar years (72 months) from the date of first matriculation unless the student has been enrolled in the DPM/PhD program or on a medical leave of absence. A student enrolled in the DPM/PhD program must complete the
podiatric medical degree requirements within six calendar years (72 months) exclusive of time spent in the graduate college portion of the program.

**Continuing Education**

The Dr. William M. Scholl College of Podiatric Medicine Office of Special Programs was created to develop programs to meet the continuing education needs of the podiatric physician. As part of an academic institution with a focus on interprofessional education, the Office of Special Programs is able to offer programs to other healthcare practitioners who also encounter foot and ankle conditions.

The focus of these programs is to increase knowledge and competence of podiatric physicians and other health professionals through lectures and workshops in order to address evidence-based medicine and practice gaps in the treatment of lower extremity disorders. Services include:

- Providing and developing continuing education opportunities for faculty, alumni and podiatric physicians
- Providing grand rounds sessions for students, residents and faculty
- Facilitating partnerships between Dr. William M. Scholl College of Podiatric Medicine programs and internal and external collaborators on continuing education programs in research or clinical areas
- Developing and promoting lectures and workshops that are sponsored by student organizations and clubs

The Dr. William M. Scholl College of Podiatric Medicine is approved by the Council on Podiatric Medical Education as a provider of continuing education in podiatric medicine. For questions, contact the Office of Special Programs at 847-578-8410.
School of Graduate and Postdoctoral Studies (SGPS)

Mission
To provide outstanding graduate education and postdoctoral training to meet the need for highly qualified researchers and educators in the life sciences and healthcare fields, and to advance knowledge through biomedical research.

Vision
To excel in all facets of the training of graduate students and postdoctoral fellows, and thereby gain national recognition for preparing outstanding biomedical scientists and educators whose contributions will advance knowledge in the life sciences.

Values
Diversity • Excellence • Innovation • Integrity • Mentorship • Scholarship • Scientific Curiosity

Programs of Study
The aim of the graduate training program is to develop scientists competent in critical thinking, scientific writing and the research skills and techniques of their respective fields. This training prepares students to pursue science-focused careers in research, academia, government, industry, communication and many others. Program mentorship, travel to scientific meetings, networking and career development events provide mechanisms in which trainees can explore this wide variety of careers.

Master of Science
Biochemistry and Molecular Biology
Cell Biology and Anatomy
Cellular and Molecular Pharmacology
Microbiology and Immunology
Neuroscience
Physiology and Biophysics

Regular students admitted to the Graduate school in pursuit of the Master of Science (MS) degree must have a research mentor and MS thesis research project already determined at the time of acceptance. A research committee provides input on the student’s research project. In addition to ethics, statistics, presentation, computer applications, and scientific writing core coursework required of students, advanced coursework in the individual discipline is custom designed for each student. There is great flexibility in this determination based on the educational background of the student.

The typical length of time required to complete the MS degree is two years.
Doctor of Philosophy

Biochemistry and Molecular Biology
Cell Biology and Anatomy
Cellular and Molecular Pharmacology
Microbiology and Immunology
Neuroscience
Physiology and Biophysics

Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS)

Regular first-year students in the Doctor of Philosophy (PhD) program enter the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). This program takes the students through one year of core studies relevant to the various degree offering programs in the School of Graduate and Postdoctoral Studies. The core curriculum emphasizes both graduate-level coursework such as Molecular and Cell Biology and Systems Biology as well as graduate student career development in specific competencies such as scientific data presentation and ethics in research. Elective coursework is tailored to individual students to pursue additional knowledge in physiology, developmental and molecular biology, neuroscience, etc. All students attend monthly seminars organized by the graduate school, featuring internationally recognized scientists. Multiple advanced scientific seminars and journal clubs are also sponsored by the academic programs.

Students engage in research immediately upon entry into the program. These initial research experiences are coordinated through laboratory rotations that familiarize students with the diversity of research labs and experimental paradigms available for students to conduct their in-depth dissertation research. The first year also includes rotations into different laboratories, allowing the student to experience the type of research that is done in each laboratory before making a laboratory selection. Each student progresses through a minimum of three distinct laboratory research experiences. By the end of the first year, the IGPBS student selects a mentor/advisor in whose laboratory their doctoral thesis will be researched and transitions into a discipline-specific program in which to complete their degree.

Recommendation to Candidacy (PhD) – The Candidacy Examination

Successful completion of the Doctoral Candidacy Exam is a required component of degree progression toward the PhD. The exam is comprised of a written component and an oral examination. For the written portion, the student will formulate a research project and write a grant proposal. The proposal will be formatted by the current standards of an NIH R01 application. The second part of the Doctoral Candidacy Exam is the oral examination. This portion of the exam is based on the written research proposal and core and advanced courses taken by the student in their graduate education. The student’s Research Committee will administer the exam and assess the student.

The Research Committee may recommend to the Dean of the School of Graduate and Postdoctoral Studies, that the student advance to candidacy. With approval of the Dean, the
student will advance to the status of “Candidate for Doctoral Degree.” The Research Committee may recommend deferral of advancement to candidacy with an opportunity to remediate deficiencies and re-take the exam. The Research Committee may also recommend that the student transition to a Master’s degree program and earn a MS degree upon successful completion of MS degree requirements. Lastly, the Research Committee may recommend that the student not advance in either doctoral or Master’s degree programs. The procedures for preparation, administration and reporting of the Doctoral Candidacy Exam are contained with the SGPS Policies and Procedures Manual.

The typical time to degree completion for the PhD degree averages 5.5 years.

**Combined Degree Programs**

In conjunction with the Chicago Medical School, Dr. William M Scholl College of Podiatric Medicine, and the College of Pharmacy, SGPS offer the PhD degree in combination with the MD, DPM, and PharmD degrees. Upon enrollment in the Combined Degree Program, the student is considered to be concurrently studying in both the professional program’s school and SGPS through completion of their PhD and clinical degrees. Students are active in coursework for one of the degrees at a time. In consideration of the content in their professional program, Combined Students may have certain PhD courses waived, but will be required to take the IGPBS Specialty Courses. For more specific information, please reference the information in each of the professional programs’ catalog sections.

- **MD/PhD** Application may be made simultaneously to both schools either directly through the AMCAS process or after the completion of the first year of medical education at the Chicago Medical School.

- **DPM/PhD** Application may be made only after completion of the first year of podiatric medical education at Dr. William M. Scholl College of Podiatric Medicine. Accepted students begin studies after completion of their second-year Podiatry requirements.

- **PharmD/PhD** Application may be made only after completion of the first year of pharmacy education in the RFUMS College of Pharmacy. Accepted students begin studies after completion of their second-year Pharmacy requirements.

**Admission Requirements**

In addition to the university’s minimum requirements, applicants must meet the following program requirements:

- **Prior Degree**: Bachelor’s degree from a regionally accredited institution, or its international equivalent.
- **Prerequisite Courses**: No prerequisite courses are required.
- **Grade-Point Average (GPA)**: A minimum grade-point average (GPA) of 3.0 on a 4.0 scale.
- Adequate preparation in science and research is recommended.
- **Tests:** SGPS requires the Test of English as a Foreign Language (TOEFL), if applicable. A score of 50th percentile or higher is recommended.
- **Letters of Recommendation:** Three letters of recommendation, one of which must be from the primary research mentor.
- **Resume or Curriculum Vitae:** This program does require a resume or curriculum vitae.
- **Personal Statement:** This program does require a personal statement.
- **Transfer Applicant Policy:** This program evaluates transfer applicants on a case-by-case basis.
- **Non-Degree Applicant Policy:** Non-degree applicants will be evaluated on a case-by-case basis.
- **Supplemental Application:** This program does not have a supplemental application.
- **Early Decision Programs:** This program does not accept early decision applicants.

**Technical Standards**
A candidate for the MS or PhD degree must possess abilities and skills that include: observational, communicational, motor, intellectual-conceptual (integrative and quantitative) and behavioral and social. The use of a trained intermediary is not acceptable in laboratory situations; it implies that a candidate’s judgment must be mediated by someone else’s skill.

- **Observation:** The candidate must be able to acquire information as presented through demonstration and experiences in the basic sciences. This includes information conveyed through physiological and pharmacological demonstrations in animals, microbiological cultures and microscopic images of microorganisms and tissues in normal and pathological states. Furthermore, a candidate must be able to:
  - Observe experimental results or subjects accurately, acquire information from written documents and visualize information as presented in images from paper, films, slides, video or other forms of modern electronic media.
  - Interpret graphic images and other forms of data readout (such as oscilloscopes, computer screens, gels, etc.) with or without the use of assistive devices.
  - In any case, where a candidate’s ability to observe or acquire information is compromised the candidate must utilize alternate means to collect and convey the essential information. Obtaining and using such alternate means shall be the responsibility of the student. Costs should be reasonable and will be properly borne by the university if not otherwise funded.

- **Communication:** The candidate must be able to communicate effectively, efficiently and sensitively with research subjects, faculty, staff and colleagues.

- **Motor:** The candidate must possess the motor skills necessary to design and perform laboratory experiments and statistical analysis of collected data.

- **Intellectual-Conceptual (Integrative and Quantitative) Abilities:** The candidate must be able to measure, calculate, reason, analyze, integrate and synthesize data, knowledge and concepts. The candidate must be able to perform these problem-solving skills in a timely fashion.
• **Behavioral and Social Attributes:** The candidate must work to their fullest potential while exercising good judgment. They must be able to function effectively in stressful situations and adapt to changing environments. Compassion, integrity, concern for others, interpersonal skills, interest, motivation and work ethic are all personal qualities required for a successful scientific career, and are assessed during the admissions and educational process.

The School of Graduate and Postdoctoral Studies recognizes the responsibility to provide educational training for the student’s development as a responsible scientist. The faculty holds the responsibility for approving graduates who have achieved such development. In each case, the students will be judged on their achievements and behaviors, regardless of a disability. The faculty of the student’s research committee will determine whether they have met the specified criteria.

If you have any questions about these standards or other policies as they pertain to the Americans with Disabilities Act, please contact the ADA Coordinator and Director, Academic Support at ADA.Coordinator@rosalindfranklin.edu.

**Transfer Applicant Policy**
The School of Graduate and Postdoctoral Studies (SGPS) considers requests for admission from students who wish to transfer from a doctoral or master’s graduate program in a different academic institution. Prospective transfer students may request transfer at any time during their current degree progression.

To be considered for acceptance into a SGPS graduate program, each of the following conditions must be satisfied at the time the application is made and maintained throughout the application review and matriculation process (if offered admission):

- The student is currently enrolled as a full time student in a regionally accredited academic institution of higher education.
- The student holds a bachelor’s degree from a regionally accredited academic institution.
- The student is in good academic standing as defined by SGPS.
- The student has a compelling reason for transfer, e.g. relocation of the research advisor, extenuating family circumstances, as determined by SGPS.
- For those students requesting transfer into a research-based graduate program, a primary research advisor must be already identified and preliminary arrangements made with agreement by the advisor for the student to conduct research in the advisor’s research group before a transfer request will be considered. These arrangements will be formally documented and considered as part of the transfer request. It should be noted that preliminary arrangements do not constitute any obligation on the part of RFUMS to offer transfer admission.

Transfer applicants must submit the following to SGPS Admissions:

- Application form or formal petition document
- Official transcripts from current and all post-secondary institutions attended
• Current Curriculum Vitae
• Statement of reason for transfer
• Letter of support from the proposed research advisor regarding the applicant’s transfer and qualifications as a graduate student

Materials submitted by the transfer applicant will be reviewed by the Chair of the Graduate Admissions Committee. The academic standards for offers of admission are those usual and accepted standards, established by the Graduate Admissions Committee, for admission of all students into the relevant academic program. Upon completion of evaluation of the applicant’s credentials, the Chair will forward a written recommendation of acceptance or denial to the Dean of SGPS. A final decision by the Dean will be forwarded, in writing, to the applicant and the Chair of the Graduate Admissions Committee.

Additional Considerations:

• Transfer applicants admitted into an SGPS graduate program must fulfill all the requirements of the SGPS degree program for conferral of the degree. The specific requirements are those stated in the University catalog at the time of entry into the SGPS program.
• Transfer applicants admitted into a SGPS graduate program may petition for transfer of credit earned previously at a different academic institution. The policies and procedures for this petition are stated in the SGPS Policies and Procedures Manual.

Transfer Credits and Advanced Standing

The Dean, in consultation with the appropriate course director(s) and/or program administrator, will consider transferring course credits from another institution. Normally, such determination will be made individually, based on available information concerning the course work outside the institution. A “Transfer Credit/Waiver” form and supporting documentation (see below) must be submitted to the Dean of the Graduate School.

Transfer credit is academic credit that is awarded to a student by another college or university and is accepted for application to the requirements of a graduate or professional degree at Rosalind Franklin University of Medicine and Science. RFU students who have been admitted to certain graduate programs and have earned graduate credit at another college or university may petition to apply such credit toward a graduate or professional degree. Transfer of credit is not applicable to students enrolled in certificate programs. By definition, a petition to transfer credit is a request for an exception to the rule that all graduate courses must be taken at RFU. The Dean, in consultation with the appropriate course director(s) and/or program administrator, makes the decision as to whether transfer courses will be applied to a program plan and assumes the responsibility to review transfer course for verification of the core learning competencies, expectations and criteria for the requested transfer.

To be considered for transfer credit a student must be in good academic standing and:
• Demonstrate that the course meets and/or contains equivalent core learning competencies for the requested transfer, shown through a course syllabus and/or other official course material and an official transcript
• Earned the credit at a regionally accredited college or university
• Earned a grade of A or B. (RFU will accept a Pass grade if the course is graded only on a pass-fail basis.)
• Demonstrate how the course meets degree requirements at the college or university where the credit was earned

Program Change
With the approval of the program and the SGPS Dean, students who have already selected a specific degree program may change to a different discipline within SGPS. PhD students may with approval also transition to the discipline-corresponding MS program. All credits already earned in SGPS will carry over to potentially meet any equivalent requirement in the new program, and the student’s enrollment in SGPS will be considered continuous.

Core Competencies
• Demonstrate a broad base of established and evolving knowledge within their discipline and detailed knowledge of their specific research area such that they can develop testable hypotheses
• Design sound research protocols, and safely perform the techniques necessary to conduct and analyze this research
• Demonstrate appropriate interpersonal and scientific communication skills
• Adhere to accepted professional standards and practices in the laboratory, office, institution and discipline
• Exercise responsible conduct of research and make ethical and legal choices related to the same
• Develop the skills and techniques needed to manage research projects, mentor junior lab members and pursue future leadership opportunities at the local and institutional levels

Assessment for Student Learning
Grading System
A  4.00  High Achievement
B  3.00  Above Average Achievement
C  2.00  Average Achievement
F  0.00  Failure

Grades without Associated Grade Points:
P  Pass
F  Fail
Assessment Methods

Master of Science Degrees

Students enrolled in the School of Graduate and Postdoctoral Studies Master of Science programs are evaluated using a variety of assessment methods for student learning.

- Course-level assessment includes unit assignments, quizzes, exams, laboratory exercises, laboratory and computer problem sets, paper discussions and oral presentations.
- Program milestone assessments include work-in-progress presentations and the six-month evaluative progress reports.
- The combination of the master degree thesis and oral exam is used to assess student learning and determine completion of the Master of Science programs.

Doctor of Philosophy Degrees

Students enrolled in the School of Graduate and Postdoctoral Studies Doctor of Philosophy programs are evaluated using a variety of assessment methods for student learning.

- Course-level assessment includes unit assignments, quizzes, exams, laboratory exercises, laboratory and computer problem sets, paper discussions and oral presentations.
- Program milestone assessments include work-in-progress presentations and the six-month evaluative progress reports.
- The candidacy exam’s written R01 style grant application and oral examination is undertaken by the student, upon recommendation of the Research Committee.
  - Successful completion of this exam indicates the student’s acquisition of progress-appropriate, discipline-specific knowledge and basic research skills such that they may move forward with further experiments in support of the dissertation without the need to complete additional didactic coursework.
- Composition of the doctoral degree dissertation, oral presentation and dissertation defense is used to assess student learning and determine completion of the Doctor of Philosophy programs.

Graduation Requirements

Master of Science Degrees

Master of Science students must meet the following program requirements:

- 45 total quarter hours required to complete the MS degree
- Minimum of one year required to complete degree
- Maximum of five years allowed to complete degree
- Satisfactory completion of all required courses
- Satisfactory completion of the oral exam
- Submission of research findings to a peer-reviewed journal
• Publication of thesis
• A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum

Doctor of Philosophy Degrees
Doctor of Philosophy students must meet the following program requirements:

• 135 quarter hours required to complete the PhD degree
• Minimum of three years required to complete degree
• Maximum of seven years allowed to complete degree
• Satisfactory completion of all required courses
• Satisfactory completion of the candidacy exam
• Satisfactory completion of the dissertation defense
• Publication of dissertation
• A minimum grade-point average (GPA) of 3.0 on a 4.0 scale in all courses in the program curriculum

Program Degree Plans
Biochemistry and Molecular Biology (MS)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Advanced Coursework:
GBCH 543 Enzyme Structure and Mechanism (3QH)
GBCH 544 Physical Biochemistry (3QH)
GBCH 600 Biochemical Pathways (9QH)
Additional advanced coursework if indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)

Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GBCH 532 Biochemistry and Molecular Biology Journal Club (1QH per academic year)
GBCH 533 Biochemistry and Molecular Biology Seminar (1QH per academic year)
Research/Thesis:
*Students must take the following course every quarter that they are enrolled after selection of specific degree program:*
GBCH 530 Master's Thesis in Biochemistry (10-12QH per quarter)

Biochemistry and Molecular Biology (PhD)

Core Courses:
GIGP 500 First-Year Lab Rotations (32QH)
GIGP 501 Molecular Cell Biology I (5QH)
GIGP 502 Molecular Cell Biology II (5QH)
GIGP 503 Systems Lectures (4QH)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – *every five years*
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Other GIGP Courses:
GIGP 505 Cellular and Molecular Developmental Biology (4QH)

Advanced Coursework:
GBCH 543 Enzyme Structure and Mechanism (3QH)
GBCH 544 Physical Biochemistry (3QH)
GBCH 600 Biochemical Pathways (9QH)
*Additional advanced coursework as indicated by Research Committee*

Repeated Courses:
*Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:*
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
*Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:*
GBCH 532 Biochemistry and Molecular Biology Journal Club (1QH per academic year)
GBCH 533 Biochemistry and Molecular Biology Seminar (1QH per academic year)

Dissertation Research:
*Students must take one of the following courses every quarter that they are enrolled after selection of specific degree program:*
GBCH 599 Pre-Candidacy Research Activities (10-12QH per quarter)
*OR*
GBCH 699 Post-Candidacy Doctoral Research Activities (10-12QH per quarter)
Cell Biology and Anatomy (MS)

Specialty Courses:
- GIGP 507 Art of Scientific Presentations (2QH)
- GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
- GIGP 509 Biostatistics (1QH)
- GIGP 518 Writing Skills (1QH)
- GIGP 519 History and Philosophy of Science (1QH)

Advanced Coursework:
- GIGP 501 Molecular-Cell Biology I (5QH)
  Additional advanced coursework if indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
- GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
- GCBA 532 Cell Biology and Anatomy Journal Club (1QH per academic year)
- GCBA 533 Cell Biology and Anatomy Seminar (1QH per academic year)

Research/Thesis:
Students must take the following course every quarter that they are enrolled after selection of specific degree program:
- GCBA 530 Master’s Thesis in Cell Biology and Anatomy (10-12QH per quarter)

Cell Biology and Anatomy (PhD)

Core Courses:
- GIGP 500 First-Year Lab Rotations (32QH)
- GIGP 501 Molecular Cell Biology I (5QH)
- GIGP 502 Molecular Cell Biology II (5QH)
- GIGP 503 Systems Lectures (4QH)

Specialty Courses:
- GIGP 507 Art of Scientific Presentations (2QH)
- GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
- GIGP 509 Biostatistics (1QH)
- GIGP 518 Writing Skills (1QH)
- GIGP 519 History and Philosophy of Science (1QH)

Other GIGP Courses:
- GIGP 505 Cellular and Molecular Developmental Biology (4QH)
Advanced Coursework:
GCBA 600 Advanced Cell Biology (1QH)
GBCA 604 Techniques in Cell Biology (2QH)
Additional advanced coursework as indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GCBA 532 Cell Biology and Anatomy Journal Club (1QH per academic year)
GCBA 533 Cell Biology and Anatomy Seminar (1QH per academic year)

Dissertation Research:
Students must take one of the following courses every quarter that they are enrolled after selection of specific degree program:
GCBA 599 Pre-Candidacy Research Activities (10-12QH per quarter)
OR
GCBA 699 Post-Candidacy Doctoral Research Activities (10-12QH per quarter)

Cellular and Molecular Pharmacology (MS)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Advanced Coursework:
If indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GCMP 502 Journal Club in Cellular and Molecular Pharmacology (1QH per academic year)
GCMP 509 Seminars in Cellular and Molecular Pharmacology (1QH per academic year)

Research/Thesis:
Students must take the following course every quarter that they are enrolled after selection of specific degree program:
GCMP 599 Pre-Candidacy Research Activities (10-12QH per quarter)
Cellular and Molecular Pharmacology (PhD)

Core Courses:
GIGP 500 First-Year Lab Rotations (32QH)
GIGP 501 Molecular Cell Biology I (5QH)
GIGP 502 Molecular Cell Biology II (5QH)
GIGP 503 Systems Lectures (4QH)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Other GIGP Courses:
GIGP 512 Neuroscience (5QH)
GIGP 516 Physiology for Neuro-Pharm Research (3QH)

Advanced Coursework:
GCMP 601 Neuropharmacology I (1QH)
GCMP 602 Neuropharmacology II (1QH)
GCMP 605 Pharmacology Core (6QH)
GCMP 700 Teaching in Pharmacology (1QH)
Additional advanced coursework as indicated by Research Committee

Electives (1QH minimum):
students must choose at least one of the following:
GNSC 600 Neuronal Physiology and Signaling (2QH)
GNSC 606 Neurodegeneration (1QH)

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GCMP 502 Journal Club in Cellular and Molecular Pharmacology (1QH per academic year)
GCMP 509 Seminars in Cellular and Molecular Pharmacology (1QH per academic year)

Dissertation Research:
Students must take one of the following courses every quarter that they are enrolled after selection of specific degree program:
GCMP 599 Pre-Candidacy Research Activities (10-12QH per quarter)
OR
GCMP 699 Post-Candidacy Doctoral Research Activities (10-12QH per quarter)
Microbiology and Immunology (MS)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Advanced Coursework:
If indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GMIC 532 Microbiology and Immunology Journal Club (1QH per academic year)
GMIC 533 Seminar in Microbiology and Immunology (1QH per academic year)

Research/Thesis:
Students must take the following course every quarter that they are enrolled after selection of specific degree program:
GMIC 530 Master’s Thesis in Microbiology and Immunology (10-12QH per quarter)

Microbiology and Immunology (PhD)

Core Courses:
GIGP 500 First-Year Lab Rotations (32QH)
GIGP 501 Molecular Cell Biology I (5QH)
GIGP 502 Molecular Cell Biology II (5QH)
GIGP 503 Systems Lectures (4QH)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Other GIGP Courses:
GIGP 505 Cellular and Molecular Developmental Biology (4QH)

Advanced Coursework:
GMIC 600 Medical Microbiology and Immunology I (3QH)
GMIC 601 Medical Microbiology and Immunology II (2QH)  
GMIC 605 Molecular Biology Techniques (2QH)  
*Additional advanced coursework as indicated by Research Committee*

**Electives (4QH minimum):**  
*Students must choose at least two of the following:*  
GMIC 503 Virology (4QH)  
GMIC 560 Advanced Immunology (3QH)  
GMIC 606 Cancer Biology and Signaling (1QH)

**Repeated Courses:**  
*Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:*  
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)  
*Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:*  
GMIC 532 Microbiology and Immunology Journal Club (1QH per academic year)  
GMIC 533 Seminar in Microbiology and Immunology (1QH per academic year)

**Dissertation Research:**  
*Students must take one of the following courses every quarter that they are enrolled after selection of specific degree program:*  
GMIC 599 Pre-Candidacy Research Activities (10-12QH per quarter)  
*OR*  
GMIC 699 Post-Candidacy Doctoral Research Activities (10-12QH per quarter)

**Neuroscience (MS)**

**Specialty Courses:**  
GIGP 507 Art of Scientific Presentations (2QH)  
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – *every five years*  
GIGP 509 Biostatistics (1QH)  
GIGP 518 Writing Skills (1QH)  
GIGP 519 History and Philosophy of Science (1QH)

**Advanced Coursework:**  
*If indicated by Research Committee*

**Repeated Courses (Regular Neuroscience Track):**  
*Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:*  
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)  
*Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:*  
GNSC 504 Neuroscience Seminar (1QH per academic year)  
GNSC 553 Neuroscience Journal Club (1QH per academic year)
Repeated Courses (Neuropharmacology Track):
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GCMP 502 Journal Club in Cellular and Molecular Pharmacology (1QH per academic year)
GCMP 509 Seminars in Cellular and Molecular Pharmacology (1QH per academic year)

Research/Thesis:
Students must take the following course every quarter that they are enrolled after selection of specific degree program:
GNSC 530 Master’s Research in Neuroscience (10-12QH per quarter)

Neuroscience (PhD)

Core Courses:
GIGP 500 First-Year Lab Rotations (32QH)
GIGP 501 Molecular Cell Biology I (5QH)
GIGP 502 Molecular Cell Biology II (5QH)
GIGP 503 Systems Lectures (4QH)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Other GIGP Courses:
GIGP 512 Neuroscience (5QH)
GIGP 516 Physiology for Neuro-Pharm Research (3QH)

Regular Neuroscience Track

Advanced Coursework:
GCMP 601 Neuropharmacology I (1QH)
G CMP 602 Neuropharmacology II (1QH)
GNSC 505 Human Brain Dissection (1QH)
GNSC 570 Principles and Practice in Neuroscience Teaching (2QH)
GNSC 600 Neuronal Physiology and Signaling (2QH)
GNSC 605 Techniques in Microscopy (1QH)
GNSC 606 Neurodegeneration (1QH)
Additional advanced coursework as indicated by Research Committee
Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)

Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GNSC 504 Neuroscience Seminar (1QH per academic year)
GNSC 553 Neuroscience Journal Club (1QH per academic year)

OR Neuropharmacology Track

Advanced Coursework:
GCMP 601 Neuropharmacology I (1QH)
GCMP 602 Neuropharmacology II (1QH)
GCMP 605 Pharmacology Core (6QH)
GCMP 700 Teaching in Pharmacology (1QH)
GNSC 600 Neuronal Physiology and Signaling (2QH)
GNSC 606 Neurodegeneration (1QH)
Additional advanced coursework as indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)

Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GCMP 502 Journal Club in Cellular and Molecular Pharmacology (1QH per academic year)
GCMP 509 Seminars in Cellular and Molecular Pharmacology (1QH per academic year)

Dissertation Research:
Students must take one of the following courses every quarter that they are enrolled after selection of specific degree program:
GNSC 599 Pre-Candidacy Research Activities (10-12QH per quarter)
OR
GNSC 699 Post-Candidacy Doctoral Research Activities (10-12QH per quarter)

Physiology and Biophysics (MS)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)
Advanced Coursework:
GPHY 522 Topics in Physiology (6QH)
Additional advanced coursework if indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GPHY 505 Physiology and Biophysics Seminar (1QH per academic year)
GPHY 711 Physiology and Biophysics Journal Club (1QH per academic year)

Research/Thesis:
Students must take the following course every quarter that they are enrolled after selection of specific degree program:
GPHY 620 Master’s Research in Physiology (10-12QH per quarter)

Physiology and Biophysics (PhD)

Core Courses:
GIGP 500 First-Year Lab Rotations (32QH)
GIGP 501 Molecular Cell Biology I (5QH)
GIGP 502 Molecular Cell Biology II (5QH)
GIGP 503 Systems Lectures (4QH)

Specialty Courses:
GIGP 507 Art of Scientific Presentations (2QH)
GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1QH) – every five years
GIGP 509 Biostatistics (1QH)
GIGP 518 Writing Skills (1QH)
GIGP 519 History and Philosophy of Science (1QH)

Other GIGP Courses:
GIGP 506 Systems Physiology (6QH)

Advanced Coursework:
GPHY 500 Medical Physiology (14QH)
GPHY 534 Teaching Methods (4QH)
Additional advanced coursework as indicated by Research Committee

Repeated Courses:
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled:
GMTD 709 Molecular and Cellular Sciences Seminar Series (1QH per academic year)
Students must take the following courses every Fall, Winter, and Spring quarter that they are enrolled after selection of specific degree program:
GPHY 505 Physiology and Biophysics Seminar (1QH per academic year)
GPHY 711 Physiology and Biophysics Journal Club (1QH per academic year)

Dissertation Research:
Students must take one of the following courses every quarter that they are enrolled after selection of specific degree program:
GPHY 599 Pre-Candidacy Research Activities (10-12QH per quarter)
OR
GPHY 699 Post-Candidacy Doctoral Research Activities (10-12QH per quarter)
Course Descriptions

GBCH 530 Master’s Thesis in Biochemistry (10-12 QH)
After completing coursework, the student writes the research thesis.

GBCH 532 Biochemistry and Molecular Biology Journal Club (1 QH)
Presentations on current literature or personal research by faculty, staff and students.

GBCH 533 Biochemistry and Molecular Biology Seminar (1 QH)
Presentations on current research by invited speakers.

GBCH 543 Enzyme Structure and Mechanism (3 QH)
This is a course of lectures, student presentations and seminars by outside speakers on aspects of enzymology. The following subjects are covered: protein sequence methodology, X-ray crystallography, computer graphic modeling, chemical and enzyme kinetics including regulatory kinetics, enzyme mechanisms, chemical modification of enzymes and site-directed mutagenesis.

GBCH 544A & B Physical Biochemistry (3 QH)
This course deals with the physical chemical properties of biological macromolecules and the techniques used for their characterization. Topics include: molecular weight, hydrodynamic properties and spectroscopic properties of proteins and nucleic acids; secondary structure, tertiary structure and conformational changes of proteins; dynamics of protein-protein and protein-DNA interactions; and kinetics and thermodynamics of protein folding.

GBCH 599 Pre-Candidacy Research Activities (10-12 QH)
This course is for the PhD student who has chosen a laboratory but not yet passed the Candidacy Exam. Laboratory experience is geared toward learning techniques and obtaining preliminary data toward the student’s dissertation proposal and Candidacy Exam.

GBCH 600A & B Biochemical Pathways (9 QH)
The fundamental chemical properties and biological reactions of the various compounds important to the normally functioning human organism are studied. As far as possible, mechanisms of life processes at the cellular and molecular level are explained in terms of these properties.

GBCH 699 Post-Candidacy Doctoral Research Activities (10-12 QH)
This course is for the PhD student who has successfully passed the Candidacy Exam.

GCBA 500A & B Clinical Anatomy (11 QH)
In this course, human anatomy is studied by using a regional approach that also includes functional and clinical correlations. Laboratory time is devoted exclusively to the regional dissection of a human cadaver. Supplementary offerings within the course include computerized images, guides and videos, prosected cadavers and bone sets for individual study.

GCBA 502A & B Histology (5 QH)
The principal educational goal of this course is an understanding of cell, tissue, and organ structure and function through the detailed study of light microscopic preparations and electron micrographs.

GCBA 504 Embryology (3 QH)
The development of the human from conception to delivery is examined. Emphasis is placed on mechanisms of normal development and clinically-relevant abnormal development.
GCBA 530 Master’s Thesis in Cell Biology and Anatomy (10-12 QH)
After completing coursework, the student writes the research thesis.

GCBA 532 Cell Biology and Anatomy Journal Club (1 QH)
Presentations on current literature or personal research by faculty, staff and students.

GCBA 533 Cell Biology and Anatomy Seminar (1 QH)
Presentations on current research by invited speakers.

GCBA 599 Pre-Candidacy Research Activities (10-12 QH)
This course is for the PhD student who has chosen a laboratory but not yet passed the Candidacy Exam. Laboratory experience is geared toward learning techniques and obtaining preliminary data toward the student’s dissertation proposal and Candidacy Exam.

GCBA 600 Advanced Cell Biology (1 QH)
Advanced treatment of key topic areas in modern cell biology. Course involves critical evaluation of primary literature and discussion with concentrations in nuclear organization, gene expression, cell trafficking, mitosis, meiosis, cell cycle, apoptosis, extracellular matrix, cancer and metastatic disease.

GCBA 604 Techniques in Cell Biology (2 QH)
Theory and application of fundamental techniques used to visualize cells and cellular processes. Course is partly didactic and partly student participation/observation of techniques for tissue culture, live cell imaging, electron microscopy, immunocytochemistry, confocal microscopy and visualizing molecules.

GCBA 605 Special Topics in Developmental Biology (1 QH)
Current topics of particular interest in the field of developmental biology with emphasis on discussion of current literature and relevance to the conceptual framework of the field.

GCBA 699 Post-Candidacy Doctoral Research Activities (10-12 QH)
This course is for the PhD student who has successfully passed the Candidacy Exam.

GCMP 502 Journal Club in Cellular and Molecular Pharmacology (1 QH)
Consists of informal presentation and discussion of current and novel literature in pharmacology.

GCMP 509 Seminars in Cellular and Molecular Pharmacology (1 QH)
Internationally-recognized scientists present their most recent research. Students meet for lunch with the speakers, allowing for informal interactions. May be repeated for credit.

GCMP 545 Advanced Molecular Pharmacology (1-4 QH)
Series of lectures focusing on (1) basic principles in pharmacokinetics and pharmacodynamics, including signal transduction and receptor pharmacology (2) pharmacogenomics and gene therapy and (3) drug structure/activity relationships, small molecule drug design, molecular mechanism and drug targets, and molecular basis of drug resistance. Problem-solving exercise and references will accompany discussion/lectures.

GCMP 599 Pre-Candidacy Research Activities (10-12 QH)
This course is for the PhD student who has chosen a laboratory but not yet passed the Candidacy Exam. Laboratory experience is geared toward learning techniques and obtaining preliminary data toward the student’s dissertation proposal and Candidacy Exam.
GCMP 601 Neuropharmacology I (1 QH)
Lectures present a comprehensive overview of the cellular foundations of neuropharmacology, techniques used in neuropharmacology and experimental design. Principles of excitable membranes and ion channels will be discussed. Subject matters are covered in lectures and with interactive problem-solving approaches. These lectures will provide a background to the topics covered in GCMP 602 Neuropharmacology II.

GCMP 602 Neuropharmacology II (1 QH)
Lectures focus on neurotransmitter systems and how these participate on specific behaviors and disease states. Final lecture will integrate basic neuropharmacology research with the translational aspects of drug discovery. Scholarly publications will accompany discussion lectures.

GCMP 605 Pharmacology Core (6 QH)
This course will introduce students to the basic principles of drug action. The first quarter will cover basic principles of the autonomic drugs and the therapeutic uses, side effects, and interactions of prostaglandins, NSAIDs, and central nervous system agents. The second quarter will continue the study of selected drug categories, including antimicrobials, anti-cancer drugs, general and local anesthetics, cardiac drugs and sedative/hypnotics. The third quarter will continue with drug categories that include endocrine and metabolic modulators and treatment of asthma.

GCMP 699 Post-Candidacy Doctoral Research Activities (10-12 QH)
This course is for the PhD student who has successfully passed the Candidacy Exam.

GCMP 700 Teaching in Pharmacology (1 QH)
Part of our mission is to prepare students for academic and educational positions. Students will be trained in teaching strategies and will serve as facilitators in the Medical Pharmacology small-group problem-solving sessions, and as lecturers in the Basic Biomedical Science pharmacology review sessions.

GGRD 700 Teaching Scholar (1 QH)
Part of our mission is to prepare students for academic and educational positions. Students will be trained in teaching strategies and will serve as facilitators in the Medical Pharmacology small-group problem-solving sessions, and as lecturers in the Basic Biomedical Science pharmacology review sessions.

GIGP 500 First-Year Lab Rotations (8 QH)
First-year IGPBS students complete four self-selected laboratory rotations with research faculty. These approximately eight-week rotations are designed to introduce student and mentor in the laboratory setting with the goal of determining student/mentor match. At the end of the rotations, the student will select their dissertation advisor from among those faculty members with whom the rotations were held.

GIGP 501 Molecular Cell Biology I (5 QH)
In this course, the molecular and cellular processes common to all eukaryotic cells are studied and, where appropriate, comparisons to prokaryotic cells are made. The molecular and cellular processes of specific cell types and tissue types are also considered.
GIGP 502 Molecular Cell Biology II (5 QH)
A continuation and expansion of the principles taught in Molecular-Cell Biology I, this course covers the following topics: protein structure and molecular recognition, enzyme action and adaptation principles of biomolecular action and regulation receptors, signal transduction, gene expression – pre-mRNA to targeted protein degradation, antibodies-structure and function, and current methods of cell biology.

GIGP 503 Systems Lectures (4 QH)
The Systems Lectures are a series of weeklong modules, each focused on a particular disease and take the student from the disease’s primary underlying mechanism (at the cellular level or gene level, if known) to the integrated, physiological systems level. The modules are a combination of lectures and/or directed paper discussions by faculty with expertise in a particular disease area.

GIGP 505 Cellular and Molecular Developmental Biology (4 QH)
This course will introduce the students to the prominent experimental model systems used today by developmental biologists and then focus on particular underlying developmental control mechanisms that are important to the processes of cell differentiation and morphogenesis. The course is comprised of a combination of lectures and/or directed paper discussions by faculty with expertise in the various sub-topics of the course. This course is required for those students wishing to pursue studies in the Biochemistry and Molecular Biology, Cell Biology and Anatomy or Microbiology and Immunology Programs.

GIGP 506 Systems Physiology (6 QH)
The Systems Physiology elective includes the study of: cardiac, respiratory, renal, gastrointestinal and endocrine physiology. It is designed for graduate students who have successfully completed Molecular and Cell Biology I and II, but require a more complete understanding of organ-systems physiology. This course is required for those students wishing to pursue studies in the Physiology and Biophysics programs. Those students studying toward the PhD degree with an advisor in Physiology and Biophysics will be required to complete the full course in Medical Physiology GPHY 500.

GIGP 507 The Art of Scientific Presentations (2 QH)
Students learn to improve their oral presentation skills by weekly presentations and by giving and receiving peer evaluation. The successful scientific career requires clear communication of scientific results. Participants in this course practice giving and evaluating oral presentations of technical material. Topics to be covered include organization of a talk, targeting the material to the appropriate level of the audience, overcoming “stage fright,” effective visual aids, developing eye contact, effective use of voice, overcoming language barriers and handling question-and-answer sessions.

GIGP 508 Ethics and Regulatory Issues in Biomedical Research (1 QH)
This course covers the major issues related to the responsible conduct of research in the biomedical sciences, including: overt falsification, fabrication, plagiarism (FFP); authorship and peer-review guidelines; conflict of interest; mentor/trainee responsibilities; research with animal subjects; and human subject research. Online components include certification for using radioisotopes and working with vertebrate animal and human subjects.
GIGP 509 Biostatistics (1 QH)
Study of descriptive and inferential statistics with relevance to research will be included. Use of the computer for statistical analysis will be covered. There will be an opportunity to use statistics for a small pilot project.

GIGP 512 Neuroscience (5 QH)
This course, which is required for entry into both the Neuroscience and Pharmacology PhD programs, is divided into lecture and laboratory parts. Topics to be covered in the lecture portion include: the neurochemistry of transmitters, receptors and second messenger systems; developmental neurobiology; and the neural systems underlying sensory, motor, affect, memory, language and other high cognitive functions. The laboratory portion is focused on human neuroanatomy, and is taught through a combination of large-group lectures, wet labs and small discussion sessions, employing a mixture of atlases, brain models, cadaver brains and interactive computer programs. Students enrolled in this elective also must enroll in either the spring term Physiology for Neuro-Pharm Research (GIGP 516) or the Systems Physiology (GIGP 506) elective.

GIGP 516 Physiology for Neuro-Pharm Research (3 QH)
The topics reviewed in this course provide a complementary body of knowledge for students pursuing research in biomedical sciences disciplines other than physiology and biophysics. Topics include a basic overview of both general and muscle physiology, the autonomic nervous system and calcium regulation. Select topics integral to general biomedical science study are also reviewed.

GIGP 518 Writing Skills (1 QH)
This course is designed as a workshop for graduate students to further develop their technical scientific writing skills. The goal of this workshop is to write a short manuscript based on an original dataset provided. The workshop is organized into six sessions over three weeks and includes a mixture of faculty presentations and in-class group writing assignments and discussion.

GIGP 519 History and Philosophy of Science (1 QH)
The focus of this course is to explore the historical and philosophical underpinnings of current scientific research, and to utilize philosophical approaches to the theory and practice of scientific research. The course will provide a platform for discussion and education on matters pertaining to the role of science in our society, and the relation between the two. Fundamental questions that will be raised and discussed include: What is science? How does it come to its conclusions? Why should we trust scientists? Developing logical, cogent arguments will be emphasized.

GIGP 700 SGPS Research Externship (10-12 QH)
Graduate research may be conducted, with Dean’s Office, Departmental and Mentor approval, at a university or facility outside of RFU. Students remain enrolled in the School of Graduate and Postdoctoral Studies, while receiving credit for their work in an external research facility.

GMIC 503 Virology (4 QH)
This course covers fundamental animal virology including virus structure, classification, replication and genetics. Viruses of current interest that produce human disease (e.g., HIV) will be discussed. Other topics may include molecular mechanisms of viral latency, role of viruses in oncogenesis, emerging viral infections of man and viruses and gene transfer vectors in human gene therapy. The course is lecture-based and discussion of original research articles.
GMIC 520 Molecular Parasitology (3 QH)
This course involves theoretical and practical aspects of applying new biological technology to study parasites and parasitic mechanisms of major tropical diseases. Emphasis is on molecular biology (especially DNA and RNA interactions). The depth of coverage depends on the prior training of the participants. Students are expected to actively participate in discussing recent literature as well as in project-oriented research. Research topics may be directed to the background or training and interests of the students.

GMIC 530 Master’s Thesis in Microbiology and Immunology (10-12 QH)
After completing coursework, the student writes the research thesis.

GMIC 532 Microbiology and Immunology Journal Club (1 QH)
Faculty, postdoctoral fellows and students discuss current research efforts. Participants present their “work in progress” in an informal presentation, which includes an introduction to the field of interest. This series covers topics of research currently being pursued in the discipline, and is geared toward learning of each other’s work and assisting one another in defining science and presentation skills.

GMIC 533 Seminar on Microbiology and Immunology (1 QH)
Presentations on current research in the field of Microbiology and Immunology by invited speakers, faculty and students.

GMIC 542 Selected Topics in Microbiology, Virology, Parasitology, Immunology and Molecular Biology (1-2 QH)
Selected topics: Microbiology, Virology, Parasitology, Immunology and Molecular Biology will be discussed. Topics for discussion will be announced three months in advance.

GMIC 560 Advanced Immunology (3 QH)
This course is intended for graduate students who have already taken GMIC 600A, Medical Microbiology and Immunology. The Advanced Immunology course will focus on issues related to host-pathogen interaction and response to infection. Particular emphasis will be given to innate immunity and inflammation. Aberrant immune responses that cause pathologies not related to infections (i.e., autoimmunity, allergy, etc.) will also be examined. Rather than analyzing each component of the immune response in isolation, the course’s goal is to emphasize how several responses are simultaneously activated in the course of an infection and how they affect each other and the whole organism.

GMIC 599 Pre-Candidacy Research Activities (10-12 QH)
This course is for the PhD student who has chosen a laboratory but not yet passed the Candidacy Exam. Laboratory experience is geared toward learning techniques and obtaining preliminary data toward the student’s dissertation proposal and Candidacy Exam.

GMIC 600 Medical Microbiology and Immunology I (3 QH)
This course consists of two parts: (1) lectures in immunology, basic bacteriology and pathogenic bacteria and (2) student’s review, presentation and discussion of latest articles related to subjects of the lectures.

GMIC 601 Medical Microbiology and Immunology II (2 QH)
This course consists of two parts: (1) lectures in immunology, basic bacteriology and pathogenic bacteria and (2) student’s review, presentation and discussion of latest articles related to subjects of the lectures.
GMIC 605 Molecular Biology Techniques (2 QH)
This course will give students a working knowledge of various molecular experimental approaches and to understand the advantages and limitations of each.

GMIC 606 Cancer Biology and Signaling (1 QH)
This course covers the basic biology of cancer at the cellular and molecular levels with special emphasis on aberrant signal transduction in cancer cells. The course involves lectures and discussion of original research/review articles.

GMIC 699 Post-Candidacy Doctoral Research Activities (10-12 QH)
This course is for the PhD student who has successfully passed the Candidacy Exam.

GMTD 301 Cellular & Molecular Biology Lab for Veterans (1 QH)
This laboratory course teaches basic concepts of molecular and cellular biology using a molecular biology research project. The research project will introduce military veterans to standard genetic, cell biology and molecular biological techniques commonly used in a molecular biology lab, such as the Bradford assay, primer design, DNA isolation, gel-electrophoresis, transformation, tissue culture, transfection and western blot. The project will also provide students with hands-on understanding of bioinformatics tools for analyzing DNA sequences.

GMTD 709 Molecular and Cellular Sciences Seminar Series (1 QH)
Internationally known biomedical scientists provide exciting seminars for all who are interested in attending. Graduate students are also invited to attend a lunch with visiting speakers.

GNSC 504 Neuroscience Seminar (1 QH)
Presentations on current research in the field of Neuroscience by invited speakers.

GNSC 505 Human Brain Dissection (1 QH)
An intensive short course where students will carry out a detailed dissection of a human cadaver brain. This dissection will expose them to all the major areas of the human forebrain, brainstem and cerebellum, including major fiber tracts, subcortical nuclei and their connections to brainstem and cortical structures. Special emphasis will be placed on human limbic structures and the circuitry underlying emotion, addiction and other psychiatric disorders.

GNSC 530 Master's Research in Neuroscience (10-12 QH)
Original research and thesis preparation in partial fulfillment of the Master's Degree.

GNSC 553 Neuroscience Journal Club (1 QH)
Presentations on current literature, personal research and newsworthy developments in neuroscience by faculty, staff and students.

GNSC 570 Principles and Practice in Neuroscience Teaching (2 QH)
Prepare and lead weekly small-group sessions to help teach neuroanatomy to first-year medical students in the Medical Neuroscience Course (MNSC 502).

GNSC 599 Pre-Candidacy Research Activities (10-12 QH)
This course is for the PhD student who has chosen a laboratory but not yet passed the Candidacy Exam. Laboratory experience is geared toward learning techniques and obtaining preliminary data toward the student’s dissertation proposal and Candidacy Exam.
GNSC 600 Neuronal Physiology and Signaling (2 QH)
A thorough review of neurophysiological function, including the ionic basis of the neuronal membrane potential and action potentials, pre- and post-synaptic signaling, cable properties, integrative properties and synaptic plasticity.

GNSC 605 Techniques in Microscopy (1-2 QH)
A comprehensive “hands-on” instruction to state-of-the-art microscopy and design-based stereology. Lectures cover the fundamentals of tissue preparation and staining, microscopy, digital imaging and confocal stereology. Approximately half of the course time is spent using the equipment.

GNSC 606 Neurodegeneration (1 QH)
Mechanisms of brain death and neuronal degeneration resulting from chronic or acute diseases and their prospects for recovery. Topics include the clinical features and animal models of traumatic brain injury, stroke, spinal cord injury, Parkinson’s, Alzheimer’s and Huntington’s diseases.

GNSC 699 Post-Candidacy Doctoral Research Activities (10-12 QH)
This course is for the PhD student who has successfully passed the Candidacy Exam.

GPHY 500A, B & C Medical Physiology (14 QH)
The course offers the basic principles of organ system physiology. Through lectures, demonstrations, conferences and laboratory work, students receive a quantitative and integrated concept of subcellular, cellular and organ system function.

GPHY 505 Physiology and Biophysics Seminar (1 QH)
Students, staff and invited guests present their current research programs in physiology for discussion and analysis.

GPHY 513 Pulmonary Pathophysiology (2 QH)
The biophysics of pulmonary mechanics and gas transport are presented as a basis for evaluating pulmonary function. Modern pulmonary function-testing equipment is utilized in the laboratory, and an emphasis is placed on recognizing abnormal lung volumes and airflows.

GPHY 516 Cardiovascular Pathophysiology (2 QH)
Clinical aspects of cardiovascular function are emphasized, e.g., heart sounds and murmurs, electrocardiogram, monitoring of central venous pressure and cardiac function curves.

GPHY 522A, B & C Topics in Physiology (6 QH)
Topics in Physiology provide state-of-the-art knowledge about the physiological basis for understanding numerous pathophysiological situations in humans. The subjects in this course encompass the basic aspects of cell physiology to complex and integrated clinical situations in which normal physiology has been altered.

GPHY 534 Teaching Methods (4 QH)
To provide graduate students with practical experience in teaching physiology, advanced students present lectures and assist in the planning and direction of laboratory and discussion sessions and in the presentation of technical material under the careful supervision of the staff.

GPHY 542 Electrogenic Ion Pumps (3 QH)
The objective of this course is to conduct an in-depth survey of the current state of knowledge of the mechanisms of electrogenic active transport of ions and of other substrates whose movement
is coupled to the movement of a charged substrate. Topics to be discussed include: (1) basic principles of pump function, (2) electrogenic properties of ion pumps, (3) ion pumps and electrical properties of cell membranes, (4) bacteriorhodopsin, (5) proton pumps, (6) Na+/K+ ATPase, (7) Ca++ ATPase of sarcoplasmic reticulum, (8) FoFl ATPase and (9) cytochrome oxidase.

GPHY 599 Pre-Candidacy Research Activities (10-12 QH)
This course is for the PhD student who has chosen a laboratory but not yet passed the Candidacy Exam. Laboratory experience is geared toward learning techniques and obtaining preliminary data toward the student’s dissertation proposal and Candidacy Exam.

GPHY 618 Molecular Biophysics of Ion Channels (3 QH)
This course will cover both experimental and theoretical aspects of ionic channels in biological membranes. Topics to be discussed include the following: (1) classical biophysics of the squid giant axon, (2) Na+ and K+ channels, (3) calcium channels, (4) K+ and chloride channels, (5) endplate channels, (6) properties of ions in solution, (7) properties of pores, (8) counting channels, (9) ionic selectivity, (10) ion saturation and binding, (11) mechanisms of drug block and (12) gating mechanisms.

GPHY 620 Master’s Research in Physiology (10-12 QH)
Research hours performed following submission and approval of a research project by the candidate’s Thesis Committee.

GPHY 699 Post-Candidacy Doctoral Research Activities (10-12 QH)
This course is for the PhD student who has successfully passed the Candidacy Exam.

GPHY 711 Physiology and Biophysics Journal Club (1 QH)
Presentations on current literature or individual research projects by faculty and students.

HAPA 535 Medical Terminology (1 QH)
This course instructs the student in an advanced level of medical terminology pertinent to the practice of Pathologists’ Assistants.

HAPA 540 Autopsy Pathology (2 QH)
This course provides an introduction to autopsy pathology and includes instruction in evisceration techniques and perinatal and pediatric pathology.

HAPA 540A Autopsy Pathology Lab (2 QH)
This is the corresponding laboratory to complement the Autopsy Pathology lecture-based course, and provides the student with hands-on experience practicing autopsy techniques on cadavers.

HAPA 550 Seminar I (2 QH)
This is the first part of a four-course sequence designed to address special topics pertinent to Pathologists’ Assistant students in the didactic year. The content includes topics such as history of the profession, professional development, pathology in literature, etc. In each course, students will examine current and emerging information relevant to the topic addressed as a means to help students develop an understanding of the commitment to continuous learning that is required of Pathologists’ Assistants.

HAPA 551 Seminar II (2 QH)
This is the second part of a four-course sequence designed to address special topics pertinent to Pathologists’ Assistant students in the didactic year. The content includes topics such as history
of the profession, professional development, pathology in literature, etc. In each course, students
will examine current and emerging information relevant to the topic addressed as a means to help
students develop an understanding of the commitment to continuous learning that is required of
Pathologists’ Assistants.

HAPA 552 Seminar III (2 QH)
This is the third part of a four-course sequence designed to address special topics pertinent to
Pathologists’ Assistant students in the didactic year. The content includes topics such as history
of the profession, professional development, pathology in literature, etc. In each course, students
will examine current and emerging information relevant to the topic addressed as a means to help
students develop an understanding of the commitment to continuous learning that is required of
Pathologists’ Assistants.

HAPA 553 Seminar IV (2 QH)
This is the fourth part of a four-course sequence designed to address special topics pertinent to
Pathologists’ Assistant students in the didactic year. The content includes topics such as history
of the profession, professional development, pathology in literature, etc. In each course, students
will examine current and emerging information relevant to the topic addressed as a means to help
students develop an understanding of the commitment to continuous learning that is required of
Pathologists’ Assistants.

HAPA 560 Clinical Correlations I (3 QH)
This is the first part of a full-year sequence designed to provide a bridge between the didactic
coursework of the first-year curriculum and its application to the practice of surgical and autopsy
pathology by Pathologists’ Assistants in the clinical setting. This course is taken in conjunction
with the corresponding Clinical Correlations Laboratory sequence and provides an introduction
to clinical medicine, microbiology, pharmacology, oncology, laboratory operations and various
aspects of general and systemic pathology, running parallel to MPAT 600A-C.

HAPA 560A Clinical Correlations I Lab (2 QH)
This is the first part of a full-year laboratory sequence designed to provide practical, hands-on
experience to complement the didactic portion of the corresponding Clinical Correlations lecture
sequence. This segment of the course provides an introduction to clinical medicine,
microbiology, pharmacology, oncology, laboratory operations and various aspects of general and
systemic pathology, running parallel to MPAT 600A-C.

HAPA 561 Clinical Correlations II (3 QH)
This is the second part of a full-year sequence designed to provide a bridge between the didactic
coursework of the first-year curriculum and its application to the practice of surgical and autopsy
pathology by Pathologists’ Assistants in the clinical setting. This course is taken in conjunction
with the corresponding Clinical Correlations Laboratory sequence and provides an introduction
to clinical medicine, microbiology, pharmacology, oncology, laboratory operations and various
aspects of general and systemic pathology, running parallel to MPAT 600A-C.

HAPA 561A Clinical Correlations II Lab (2 QH)
This is the second part of a full-year laboratory sequence designed to provide practical, hands-on
experience to complement the didactic portion of the corresponding Clinical Correlations lecture
sequence. This segment of the course provides an introduction to clinical medicine,
microbiology, pharmacology, oncology, laboratory operations and various aspects of general and
systemic pathology, running parallel to MPAT 600A-C.
HAPA 562 Clinical Correlations III (3 QH)
This is the third part of a full-year sequence designed to provide a bridge between the didactic coursework of the first-year curriculum and its application to the practice of surgical and autopsy pathology by Pathologists’ Assistants in the clinical setting. This course is taken in conjunction with the corresponding Clinical Correlations Laboratory sequence and provides an introduction to clinical medicine, microbiology, pharmacology, oncology, laboratory operations and various aspects of general and systemic pathology, running parallel to MPAT 600A-C.

HAPA 562A Clinical Correlations III Lab (2 QH)
This is the third part of a full-year laboratory sequence designed to provide practical, hands-on experience to complement the didactic portion of the corresponding Clinical Correlations lecture sequence. This segment of the course provides an introduction to clinical medicine, microbiology, pharmacology, oncology, laboratory operations and various aspects of general and systemic pathology, running parallel to MPAT 600A-C.

HAPA 563 Clinical Correlations IV (3 QH)
This is the fourth part of a full-year sequence designed to provide a bridge between the didactic coursework of the first-year curriculum and its application to the practice of surgical and autopsy pathology by Pathologists’ Assistants in the clinical setting. This course is taken in conjunction with the corresponding Clinical Correlations Laboratory sequence and provides an introduction to clinical medicine, microbiology, pharmacology, oncology, laboratory operations and various aspects of general and systemic pathology, running parallel to MPAT 600A-C.

HAPA 563A Clinical Correlations IV Lab (2 QH)
This is the fourth part of a full-year laboratory sequence designed to provide practical, hands-on experience to complement the didactic portion of the corresponding Clinical Correlations lecture sequence. This segment of the course provides an introduction to clinical medicine, microbiology, pharmacology, oncology, laboratory operations and various aspects of general and systemic pathology, running parallel to MPAT 600A-C.

HAPA 630 Anatomic Pathology Clerkship I (9 QH)
This is the first part of a ten-month practical course sequence that forms the curriculum for the second year. Students rotate through various clinical sites and departments and perform the duties of a Pathologists’ Assistant under the guidance of a preceptor. Emphasis will be placed on developing the student’s skills of gross tissue description, dissection and frozen section preparation in surgical pathology. In autopsy pathology, emphasis will be placed on autopsy technique including evisceration and block dissection.

HAPA 631 Anatomic Pathology Clerkship II (13 QH)
This is the second part of a ten-month practical course sequence that forms the curriculum for the second year. Students rotate through various clinical sites and departments and perform the duties of a Pathologists’ Assistant under the guidance of a preceptor. Emphasis will be placed on developing the student’s skills of gross tissue description, dissection and frozen section preparation in surgical pathology. In autopsy pathology, emphasis will be placed on autopsy technique including evisceration and block dissection.

HAPA 632 Anatomic Pathology Clerkship III (15 QH)
This is the third part of a ten-month practical course sequence that forms the curriculum for the second year. Students rotate through various clinical sites and departments and perform the duties of a Pathologists’ Assistant under the guidance of a preceptor. Emphasis will be placed on
developing the student’s skills of gross tissue description, dissection and frozen section preparation in surgical pathology. In autopsy pathology, emphasis will be placed on autopsy technique including evisceration and block dissection.

**HAPA 633 Anatomic Pathology Clerkship IV (7 QH)**
This is the fourth part of a ten-month practical course sequence that forms the curriculum for the second year. Students rotate through various clinical sites and departments and perform the duties of a Pathologists’ Assistant under the guidance of a preceptor. Emphasis will be placed on developing the student’s skills of gross tissue description, dissection and frozen section preparation in surgical pathology. In autopsy pathology, emphasis will be placed on autopsy technique including evisceration and block dissection.

**HAPX 529A & B same as HIPS 515A & B**

**HAPX 532 same as HPAS 551**

**HAPX 563 same as MCBA 501**

**HAPX 578A & B same as PBBS 503A & B**

**HAPX 579 same as PBBS 504**

**HAPX 677A, B & C same as MPAT 600A, B & C**

**HBHX 514 same as HHCM 521**

**HBHX 516 same as HHCM 523**

**HBHX 517 same as HHCM 524**

**HBHX 518 same as HHCM 525**

**HBMS 501A, B & C Introduction to Interprofessional Health Care (2.5 QH)**
This course presents a general overview of health care in the United States with emphasis on the importance of collaboration among healthcare professionals. Students are given the opportunity to explore a variety of healthcare professions.

**HBMS 502 Foundations of Clinical Medicine (3 QH)**
This is a five-week course exploring the foundations of clinical medicine for future health care professionals.

**HBMS 503A & B Clinical Molecular Cell Biology (3.5 QH)**
The content of this course is aligned with USMLE guidelines. Topics include cell membranes, cell adhesion, cell transport, cell signaling, cell architecture, cell cycle, mitosis, meiosis, prokaryotic vs eukaryotic cells, cytoskeleton, DNA/FNA structure, protein syntheses, gene regulation, and basic cancer biology. Students participate in two problem based learning modules and determine the cell biological foundation of a clinical case. In addition, there is a self-learning component for concepts that are too basic to be discussed in class.

**HBMS 504A & B Medical Biochemistry (5 QH)**
The medically important chemical properties and biological reactions in the normally functioning human organism are studied. The skill set to master is to relate knowledge of normal bio-molecular structure-function relationships, metabolic and regulatory processes, and defense mechanisms to the molecular basis, diagnosis and treatment of diseases. A focus is placed upon the regulation and integration of metabolic processes associated with function and dysfunction of
cellular biochemistry. Examples of common or representative diseases, including their symptoms and treatments will be introduced. Students will come to understand and be able to evaluate potential advances of diagnostic and treatment modalities. The course makes use of lectures and on-line modules. This course utilizes the self-teaching program to provide the students with an initial foundation of knowledge.

HBMS 505A & B Topics in Physiology (5 QH)
Topics in Physiology provide state-of-the-art knowledge about the physiological basis for understanding numerous pathophysiological situations in humans. The subjects in this course encompass the basic aspects of cell physiology to complex and integrated clinical situations in which normal physiology has been altered.

HBMS 506A & B Physiological Basis of Medicine (8 QH)
This course includes the study of: muscle, cardiovascular, respiratory, renal, gastrointestinal and endocrine physiology. The course is designed for students who wish to have a more complete understanding of organ-systems physiology and its application to the practice of medicine.

HBMS 507A & B Medical Neuroscience (6 QH)
This course is designed for first-year students in graduate-level health profession programs. It will provide you with the foundational knowledge in neuroscience and neuroanatomy needed to understand how ongoing discovery is shaping the diagnosis and treatment of neurobehavioral disorders.

HBPX 509 same as HHCM 516
HBPX 530 same as HIPS 561
HBPX 540 same as HPOP 540
HBPX 541 same as HPOP 541

HHCM 507 Healthcare Informatics (3 QH)
This course will provide an overview of the management of data and information resources critical to effective and efficient healthcare delivery. Course concepts will include: ensuring accurate and complete data; coding for reimbursement; ensuring quality of data; analyzing data for decision support, research and public policy; and the protection of patient privacy and security. Interactions with healthcare entities such as patient care organizations, payers, research and policy agencies, etc. will also be discussed.

HHCM 508 Marketing Healthcare (4 QH)
This course will examine critical aspects of marketing management including price, product, promotion and distribution of healthcare services as well as internal and external forces that impact marketing. The student will be introduced to strategies that provide competitive opportunities to create value for the healthcare organization and improve customer satisfaction.

HHCM 510 Global Health (3 QH)
The course is designed to introduce students to progress made in improving human health worldwide and understanding the challenges that remain. Students will focus on learning the principles and measures of health improvement, global health themes and diseases, the impact of disease on populations such as women and children, and how they can work as interprofessional team members to address these issues.
HHCM 511 Healthcare Management in Non-Hospital Settings (3 QH)
While the hospital is the centerpiece of the healthcare system, so much health care is delivered outside this setting. Students will be introduced to many healthcare services outside the traditional setting of the hospital and gain knowledge of the operations of such healthcare settings. The course will be divided into four parts: Traditional Care, Diagnosing, Acute-Care Treatment and Chronic Care, and within each area students will explore the basic operations of various healthcare settings such as outpatient clinics and surgical centers, pharmacies, outpatient laboratories, chiropractic centers, adult day care and hospice care.

HHCM 515 Healthcare Law (3 QH)
This course reviews the American legal system as the context within which to consider contemporary medico-legal issues. The course’s intent is to provide a legal framework where healthcare administration and management issues can be explored in collaboration with legal counsel. The curriculum addresses such topics as: professional liability, corporate entity risk considerations and relevant legislative activities reshaping the healthcare industry and tort reform initiatives. Representative case law and studies will augment the legal theories presented in the course.

HHCM 516 Risk and Quality Management in Healthcare (3 QH)
This course will explore the risk and quality management processes in depth. The student will be introduced to risk management strategies that reduce the likelihood of harm to people and financial loss in addition to quality management activities to ensure that standards are met and to optimize the quality of healthcare. As these functions are interwoven throughout the organization (e.g., information management, medical staff issues, insurance, claims administration, etc.), the concept of risk and quality management as “everyone’s responsibility” will be emphasized.

HHCM 517 Management Ethics (3 QH)
The course will provide an overview of bioethics including a broad range of potential concerns in which the healthcare manager may become involved. This encompasses a familiarization with bioethics nomenclature, understanding the ethical decision-making process and developing an appreciation for the ethical challenges of administrators and clinical practitioners. Legal and risk management issues surrounding ethical dilemmas in healthcare organizations will be examined in addition to the roles of institutional ethics committees and consultants.

HHCM 518 Insurance Dimensions (3 QH)
This course is intended to provide the student with an understanding of the principles of insurance related to healthcare organizations. The curriculum focuses on insurance in the healthcare setting, risk financing considerations and insurance policy analysis. The impact of recent national and world events, changing economics and policies as they relate to the healthcare insurance industry will also be explored.

HHCM 519 Practice Management (3 QH)
Practice Management offers the essential elements and support for a successful healthcare practice concentrating on facility management and organizational skills. Topics will include the organizational management landscape and management functions such as planning and decision-making, organizing, staffing and budgeting. This course will also address practical concerns such as committees and teams, and human resource management considerations such as training and development, retention and recruitment and communication. This elective course establishes a foundation for growth and professional opportunity for the health management professional.
HHCM 520 Cultural Diversity and the Management of Healthcare (3 QH)
This course introduces the student to the importance of providing culturally appropriate health care for the diverse ethnic populations encountered in the U.S. healthcare system. The significance of family traditions, cultural heritage and health and healing traditions on the patient’s interaction with the healthcare delivery system and providers will be explored. Students will develop interventions that providers and managers of health care can use to diminish the conflict that patients may experience between their traditions related to cultural heritage and the American healthcare system.

HHCM 521 Evidence-Based Management (3 QH)
This course provides an introduction to the utilization of best evidence in managing healthcare issues. The curriculum is intended to prepare the student to identify management problems and develop a related path of focused inquiry, evaluate reliable databases and searching strategies to find evidence, and base management decisions on the best evidence available.

HHCM 522 Healthcare Policy and Delivery Systems (4 QH)
The historical evolution of health services provides a backdrop for the core focus of this course: the study of the healthcare system. The curriculum includes an analysis of the current changes in the healthcare environment and the problems affecting the delivery of healthcare in the United States that create a demand for government action. A study of the process of policy formation underscores the complexity and difficulty of government action. Economic and political approaches to health policy analysis will be introduced with a particular focus on contrasting competitive and regulatory approaches to the resolution of health policy problems.

HHCM 523 Current Topics in Healthcare (3 QH)
Healthcare administrators and managers must be knowledgeable about current topics that face their profession. Using critical inquiry and research skills, students will explore current topics and controversies in the field of healthcare administration and management. The ability to analyze, research and apply the findings to contemporary issues will be stressed.

HHCM 524 Organizational Behavior and Human Resources (3 QH)
This course in Organizational Behavior (OB) and Human Resources (HR) is designed to introduce students to organizational behavior theory, organizational communication and human resource management principles to effectively lead and manage an organization. The Organizational Behavior students will apply management and leadership techniques garnered from successful healthcare organizations to understand and practice management functions, including: understanding employee behavior and motivation, assessing performance, employing groups and teams, operationalizing communication, evaluating conflict and making appropriate business decisions. The Human Resources functions of planning, recruiting, selecting, training and appraising will be emphasized. Realistic case studies, collaborative discussions, practical research and peer reviews will be used to develop students’ skills in organizational behavior and human resource management. Other topics will include rights and responsibilities of employers and employees, and future trends.

HHCM 525 Strategic Planning and Leadership in Healthcare (3 QH)
This course is intended to introduce the student to leadership skills and strategic planning in healthcare organizations. Creative, collaborative problem-solving within the context of current strategic issues in healthcare will be explored. The course content provides an overview of the strategic planning process including the elements required to successfully develop and
implement short and long-term plans. The course focuses on leadership skills and qualities necessary to succeed and thrive in the healthcare industry as well as assist the students in applying theories of leadership, motivation, communication and conflict management. Students will learn the construction of a strategic plan and analyze the state of strategic planning in the healthcare industry. Additionally, students will have the opportunity to analyze their own leadership skills and create an action plan for leadership development by assessing their personal leadership strengths and weaknesses.

**HHCM 551 Accounting and Financial Management in Healthcare (4 QH)**
The course is intended to prepare the student to effectively interact with financial management staff and participate in various aspects of financial control and planning. The curriculum provides a historical perspective of financial management in health care, identifying trends in the industry and the forces that influence the financing of healthcare organizations. Financial statements, the interpretation and analysis of financial reports, and topics such as cost-benefit analysis, budgeting and capital management will also be addressed. Consideration will be given to the cost effectiveness and financial future of healthcare organizations.

**HHCM 552 Independent Study (1-6 QH)**
The independent study is an individualized learning experience designed to meet specific educational needs of the student.

**HHCM 560 Health Literacy (3 QH)**
Health Literacy has become a public health priority. Many factors impact communication with patients and their families. This course explores how age, culture, language proficiency and socioeconomic conditions significantly impact patient-provider communication. Readings and course projects introduce the connection between effective communication and health outcomes. Using conceptual foundations and applied solutions, students will use course readings and team discussions to prepare to conduct field research and analyze case studies designed to improve the ability to communicate with patients and overcome barriers related to patient compliance with treatment plans, and the appropriate use of healthcare resources. Traditional, social and electronic media will be addressed.

**HHCM 590 Final Portfolio (3 QH)**
The purpose of the final portfolio is for the Health Administration student who has successfully completed all required courses in the program to demonstrate achievement of the program competencies. The intended outcome is to demonstrate the student’s mastery of program and course goals and objectives, and to demonstrate proficiency of competencies learned. The student will make a formal PowerPoint presentation to faculty.

**HHCM 630 Public Health Epidemiology (4 QH)**
This course explores the epidemiology of infectious and acute disease. Using conceptual foundations and applied solutions, students will use course readings and team discussions to prepare to examine the impact of infectious diseases involving various populations. The taxonomy and the chain of infection required for successful transmission of disease are included.

HHCX 530 same as HIPS 561
HHCX 537 same as HPOP 508
HHCX 538 same as HPOP 530
HHCX 539 same as HPOP 535
HHPE 510 Learning Theories (3 QH)
Students will examine domains of learning and adult learning theories and how they apply to health professions students. Topics include best practices for motivation, adapting to various learning styles, teaching models/strategies, instructional paradigms and interprofessional learning environments. The concept of lifelong learning is introduced and students will explore the role that higher education and corporate education/training play in instilling a desire for lifelong learning. In addition, students will develop statements of teaching philosophy and philosophy on interprofessional education.

HHPE 512 Instructional Presentation Skills (3 QH)
Students will acquire classroom presentation skills as they explore effective teaching and learning strategies. Topics include effective speaking, use of technology in the classroom, creation of PowerPoint presentations, effective communication through posters, creating dynamic learning environments, and adapting presentations to interprofessional groups of students.

HHPE 516 Clinical Instruction and Mentoring (3 QH)
Students will examine the process of clinical instruction and mentoring including defining learning and performance objectives, creating student evaluation tools, determining clinical site and mentor criteria, and creating positive clinical learning experiences. Students will also explore the incorporation of an interprofessional experience into students’ clinical rotations.

HHPE 520 Educational Trends and Issues (3 QH)
Students will discuss changes in educational theories and practices as well as the incorporation of new ideas into educational models. Topics may include collaborative learning environments, virtual learning communities, generational concerns in education, cultural concerns in education, and the movement of education toward interprofessionalism.

HHPE 530 Curriculum Design (3 QH)
Students will work through the process of curriculum development. Topics include needs assessment, alignment with institution mission and vision, course sequencing and planning learning. Students will design needs assessment instruments which will identify needs that can be met with training interventions.

HHPE 535 Instructional Design for Health Professions Education (4 QH)
Students will apply curriculum design techniques to design a course in an area of interest. Activities will include writing learning objectives, designing assessment tools and developing content. Students will also discuss how to adapt courses to include interprofessional students.

HHPE 540 Classroom Assessment (4 QH)
Students will examine various tools to assess student learning in the classroom setting. Topics include annotated portfolios, concept maps, memory matrix, process analysis, rubrics development and the use of reflective statements. Students will also discuss how to adapt assessment tools to include interprofessional students.
HHPE 545 Evaluating Clinical Competence (3 QH)
Students will develop appropriate tools to evaluate student performance in a clinical setting. In addition, students will develop a clinical rotation manual in their area of interest.

HHPE 560 Managing Change in Educational Organizations (3 QH)
Students will examine change and its impact on educational organizations. They will explore change management strategies, addressing the concerns of an interprofessional community, aligning change with institutional mission, becoming a change agent, counteracting resistance to change and influencing strategic planning.

HHPE 580 Research in Education (3 QH)
Students will review the process of research and its use in the educational setting. In addition, students will develop skills for critically evaluating research, and explore the possibilities of conducting educational research. Students will also suggest methods for investigating the impact of interprofessional education and/or multi-cultural concerns in health professions education.

HHPE 602 Designing Simulated Learning Activities (3 QH)
In this course, the concepts of simulations and games will be explored along with their applications to education. Students will work through the process of designing a simulation in their area of interest.

HHPE 620 Program Evaluation and Accreditation (3 QH)
In this course, students explore program assessment and evaluation methods used in organizations of higher learning. Various topics include institutional and program accreditation, outcomes-based assessment and staff and faculty evaluation.

HHPE 680 Teaching Practicum (3 QH)
Students will integrate knowledge and skills acquired from all coursework in this degree program to design, teach and evaluate a unit of study in an actual classroom, online or clinical setting. Students will first write a proposal detailing and justifying their chosen unit within the intended curriculum prior to engaging in the practicum experience. Students are responsible for securing their own practicum sites. The teaching practicum may be discipline-specific or may be conducted in an interprofessional setting.

HHPE 685 Portfolio Presentation (1-3 QH)
Students will assemble and present their teaching portfolio. The portfolio documents student mastery of each core objective: facilitation of learning, curriculum design, student assessment and program evaluation, and educational leadership. Students will present an analysis of each item included in their portfolios along with reflections for each item. In addition, students will perform a self-evaluation regarding their teaching preparedness, including cultural competence and establishment of interprofessional relationships.

HHPX 510 same as HHCM 517
HHPX 516 same as HHCM 523
HHPX 517 same as HHCM 524
HHPX 530 same as HIPS 561
HHPX 570 same as HNUT 510
HHPX 572 same as HNUT 513
HHPX 574 same as HNUT 541
HHPX 575 same as HNUT 542

HIPS 515A & B Foundations for Interprofessional Practice (2 QH)
Foundations for Interprofessional Practice is an experiential learning opportunity for students to engage in interprofessional healthcare teams. This interactive course is intended to prepare the healthcare professional student to provide effective interprofessional patient-centered preventative health care through small/large group discussion and problem-solving activities. The curriculum of evidence-based lifestyle healthcare is focused on the promotion of health and prevention of disease. Through this content, students will learn the roles/responsibilities of other healthcare providers, how to work on teams and practice teamwork and to communicate interprofessionally to optimally care for themselves and their patients.

HIPS 560 Research Design (4 QH)
This course is an introduction to the elements of thought and the logic of critical thinking. Measurement theory and principles are studied. The role of the research in professional practice is examined. Principles and application of scientific inquiry are emphasized.

HIPS 561 Statistics for Health Professions (4 QH)
This course covers fundamental concepts and methods of statistics for data analysis, presentation, reporting and interpretation. Students will develop practical knowledge and skills for application of basic statistical analyses.

HIPS 562 Measurement Principles (4 QH)
This course is designed to assist students to understand the principles of measurement theory. An opportunity is provided to explore the reliability and validity of measurement instruments of the student’s choice.

HIPS 563A Writing for Scholars I (1 QH)
This course emphasizes the components of scientific and scholarly writing including writing style, word choice and construction of works. Use of appropriate grammar and punctuation as well as APA style in scholarly works will be reviewed.

HIPS 563B Writing for Scholars II (2 QH)
Utilization of support systems such as writing groups, and resources such as electronic databases and research librarians will be covered. Editorial processes and review will also be introduced.

HIPS 570 Qualitative Research (2 QH)
This course addresses philosophical assumptions and approaches utilized in qualitative research studies. Qualitative methods of data collection and analysis, validation and evaluation and writing in qualitative research are covered.

HIPS 600 Introduction to Doctoral Studies and Interprofessionalism (4 QH)
This course introduces the new graduate student to the importance of critical thinking and the strategies for independent inquiry necessary for doctoral-level study. It also sets the stage for interprofessional study by covering education, training, licensure, roles and functions, and history of a variety of health professions. It emphasizes the overlapping nature of the disciplines and stresses collaborative communication and action.
HIPS 601 Interprofessional Education Seminar (4 QH)
This course is a discussion-centered learning experience in which special topics in the area of Interprofessional Education are considered. Literature is identified and discussed with a recognized expert in the area.

HIPS 602 Interprofessional Practice Seminar (3 QH)
This course provides an opportunity to explore, analyze and interrogate contemporary topics in interprofessional clinical practice through review of pertinent literature under the guidance of an expert in the area.

HIPS 603 Interprofessional Theory Seminar (4 QH)
This course is a discussion-centered learning experience in which special topics in the area of Interprofessional Theory are considered. Literature is identified and discussed with a recognized expert in the area.

HIPS 605 Independent Study (3 QH)
This course allows an individual student to identify and investigate a current topic of interest in the field of interprofessionalism. Reading and research will result in a paper or formal presentation.

HIPS 631 Foundations in Interprofessional Research I – Emerging Topics (1 QH)
In this course students will identify a personal research topic of interest from a critical analysis of contemporary literature and prepare a well-organized written literature review for their research problem or scholarly project.

HIPS 632 Foundations in Interprofessional Research II – Methods (2 QH)
In this course, students will develop a hypothesis and the methods section of their research study/scholarly project proposal using either a theoretical or atheoretical approach to their research study/scholarly project depending on their focus. Instruments for data collection will also be addressed.

HIPS 633 Foundations in Interprofessional Research III – Project Design (2 QH)
In this course students will develop the design for their research study/scholarly project and conduct an evaluation of the appropriateness of the research study/scholarly project design.

HIPS 711 Building Effective Interprofessional Teams (3 QH)
The course utilizes TeamSTEPPS as a framework for assessing what it means to have an effective interprofessional team. Students will develop a shared mental model with common goals for patient safety and patient centeredness. Tools for working in teams and managing workloads will also be addressed.

HIPS 723 Leadership in Interprofessional Health Professions Education (3 QH)
Throughout the course, aspects of leadership in higher education and interprofessional health professions education are analyzed. The course covers opportunities and challenges of leadership including: (1) managing conflict, (2) leading academic initiatives, (3) implementing change management, (4) applying legal issues in health professions education, (5) policy-making, (6) managing faculty workload, (7) developing and implementing curriculum assessment and evaluation and (8) developing and implementing interprofessional initiatives.
HIPS 731 Interprofessional Research Practice I – Institutional Review Boards (3 QH)
During this course, students will address ethical issues in research and complete the Institutional Review Board (IRB) application and any necessary Informed Consent documents for their research study/scholarly project.

HIPS 732 Interprofessional Research Practice II – Conducting Research (6-8 QH)
During this course students will engage in the intervention and/or data collection phase of their research study/scholarly project.

HIPS 733 Interprofessional Research Practice III – Analyzing Data (2 QH)
During this course, students will apply appropriate qualitative or quantitative data analysis techniques based on research methodology and design. An assessment of the reliability and validity of the data from their research study/scholarly project will also be performed as appropriate. Students will write the data analysis chapters of their dissertation or scholarly project.

HIPS 734 Interprofessional Research Practice IV – Drawing Conclusions from Research (2QH)
During this course, students will interpret the data collected during their research study/scholarly project and employ standards typically used by evaluators to make judgements about their results. Students will write the summary, conclusions and recommendations sections of their dissertation or scholarly project.

HIPS 735 Interprofessional Research Practice V – Disseminating Research (2-3 QH)
During this course, students will bring their research study/scholarly project to a conclusion by editing the final versions of a dissertation or scholarly report suitable for submission to a peer-reviewed publication or venue.

HIPS 736 Interprofessional Research Practice VI – Defending Research (1 QH)
During this course, students will develop a presentation, present and defend their doctoral research study/scholarly project.

HIPS 740 Foundations in Simulation-Enhanced Health Professions Education (4 QH)
This course provides students an opportunity to discuss the transition from health professional to educator. The focus is on foundational knowledge and skills needed to design simulation-based educational experiences for the health professions. The course starts with a broad review of learning theories and domains, instructional design models and healthcare simulation. Students then explore best practices in using simulation-enhanced IP education to measure human performance as it relates to selection of modalities and methods, assessment and facilitation. Students will have the opportunity to develop course goals and write learning objectives that promote collaboration through IP simulation.

HIPS 741 Application of Simulation Design for Clinical Educators (4 QH)
This course builds on the concepts presented in Foundations in Simulation-Enhanced Health Professions Education. Students apply knowledge of learning theory, instructional design and simulation to design a complete simulation-based learning plan for healthcare and health professions education environments. Evidence-based methods to create an environment that values all members of the health care team will be explored. Through the use of research and instructional design, students develop the skills needed to select the best simulation methods and modalities, and assessment criteria to measure human performance in the areas of teamwork,
communication and collaboration. Other areas of that will be addressed include evaluation using a logic model, assessment theory as well as content and physical fidelity.

**HIPS 742 Leadership in Healthcare Simulation (3 QH)**
This course is designed to help students develop from the micro-level simulation educator (simulation activity design) to the macro-level through the analysis of simulation as it relates to overall curriculum, program evaluation and organizational quality improvements. The course covers topics related to leadership in healthcare simulation such as program evaluation, patient safety, quality improvement, simulation research, mentorship and simulation lab management. Budgeting, audio visual requirements, space allocation, workflow, simulation lab personnel management, return on investment (ROI) and grant writing will also be covered. Throughout the course students develop a plan to evaluate simulation program effectiveness and make recommendations for program improvement.

**HIPS 810 Dissertation Research (1-6 QH)**
This course provides an individualized theoretical research project addressing the integration of two professions performed in a laboratory setting. The student will identify an interprofessional problem, review literature, collect and analyze data, and prepare a publishable paper. Oral defense is required.

**HIPX 512** *same as HHCM 519*
**HIPX 517** *same as HHCM 524*
**HIPX 570** *same as HNUT 510*
**HIPX 572** *same as HNUT 513*
**HIPX 574** *same as HNUT 541*
**HIPX 575** *same as HNUT 542*

**HLSM 500 Chronic Preventable Disease and Introduction to Lifestyle Medicine (3 QH)**
This course provides the student with a framework from which to build a practice of lifestyle medicine. An introduction and overview to lifestyle medicine as an evidence-based approach to preventing, treating and reversing diseases. Discussion of the effects of chronic diseases on individuals and looking at the cost and burden of chronic diseases such as diabetes, obesity, cardiac disease, hypertension and metabolic disorder. The concepts of how to provoke behavioral change will be explored.

**HLSM 501 Strategies to Manage Mental and Emotional Health and Avoiding Risky Substances (3 QH)**
This course will focus on how mental and emotional health are negatively impacted by stress. In addition, the positive aspects of stress will be addressed. We will examine the latest research on stress-reduction techniques such as relaxation, mindfulness and meditation on health and well-being. Proper sleep is a necessity for optimal functioning of the human body. A review of the basics of sleep and sleep cycles, how sleep affects the body’s functioning. Finally, the effect of risky behaviors such as tobacco, alcohol and drug use can be detrimental to the health and wellness of individuals. The use of motivational interviewing and smoking cessation will be explored. Given the opioid crisis in the US, we will look at the opioid crisis and discuss addictive behaviors and possible solutions.
HLSM 600 Concepts of Population Health and Personal Health (3 QH)
This course will introduce the student to concepts of population health. Topics of social determinants of health, health disparities, diversity, equity and inclusion in relation to access to health care, health care policy and health literacy will be examined. The student will explore their own personal health and wellness and understand that healthcare providers must lead by example.

HLSM 601 Culinary Medicine (3 QH)
This course is designed to expose health care professionals and students to the fundamentals of cooking in order to both improve personal health and more effectively counsel patients on diet and nutrition. The emphasis of this course is on learning fundamental culinary skills for the basic preparation of healthy and delicious whole foods. Through cooking demonstrations and hands-on practice of foundational culinary skills, students will learn the basics of preparing delicious, healthy food that promotes good nutrition and reduces the risk of chronic diseases. This course is led by instructors who have a passion for cooking and health. All levels of cooking experience are welcome and encouraged (including no experience!) Everyone will eat what they’ve prepared at the end of each class.

HLSM 690 Independent Study-Practicum Project (6 QH)
This course is an independent study that the student completes as their final course. This is an individualized learning experience designed to meet the specific educational needs of the student and is focused on research, education or health care policy.

HLSX 530 same as HIPS 561
HLSX 541 same as HPOP 541
HLSX 568 same as HNUT 504
HLSX 569 same as HNUT 505
HLSX 570 same as HNUT 510
HLSX 572 same as HNUT 513
HLSX 575 same as HNUT 542
HLSX 576 same as HNUT 576
HLSX 583 same as HNUT 511
HLSX 592 same as HIPS 560

HNAS 701 Principles of Anesthesia I (6 QH)
Basic principles of nurse anesthesia will be discussed, including: preoperative assessment (interprofessional activities related to preoperative assessment of patients and patient optimization prior to surgery will be conducted with Podiatry students); the anesthesia machine and breathing circuits; airway management; monitoring; positioning; introduction to monitored anesthesia care, general anesthesia, and regional anesthesia (central neuraxial anesthesia techniques); quality and safety in anesthesia practice; and legal and historical aspects of nurse anesthesia practice. An overview of basic anesthesia pharmacology is presented through the integrated course content of HNAS 720. A hybrid approach of web-supported didactics augmented with weekly live review and case discussion sessions will be utilized.
HNAS 702 Principles of Anesthesia II (6 QH)
This course is for the student who has a foundation in the basic principles and practice of nurse anesthesia. During this quarter, students learn anesthetic management principles for surgical specialty areas. Important concepts include anatomic, physiologic, pathophysiologic, and pharmacologic principles associated with each covered disease state/specialty area of practice. The following surgical specialties are discussed in this course: neurosurgery, orthopedics, thoracic, endocrine, gynecologic, laparoscopic, renal/genitourinary, gastrointestinal, general, bariatric, organ transplant, trauma/burns, and eye/ear/nose/throat. In addition, content is provided regarding care of specific patient populations including geriatric patients, patients with cardiac disease, patients with hepatobiliary disease, and patients with endocrine disease and immune system compromise. Students will be provided with the knowledge, skill and understanding to practice regional anesthesia safely and effectively. The principles and techniques involved in the administration and management of regional anesthesia and an introduction to pain pathways will be presented. Concepts of acute pain management will be presented in the context of the clinical application of these principles in nurse anesthesia practice.

HNAS 703 Principles of Anesthesia III (5 QH)
This course is for the student who has successfully completed HNAS 701-Principles of Anesthesia I, and HNAS 702-Principles of Anesthesia II. Content includes: 1) advanced anesthesia concepts including the care of patients undergoing cardiac and major vascular surgery; 2) anesthesia care for the pediatric patient--the neonate, infant and child; and 3) anesthesia care of the parturient patient. The principles and techniques involved in the administration and management of regional anesthesia in these patient populations will be discussed.

HNAS 710 Chemistry and Physics in Anesthesia (2 QH)
In this course, nurse anesthesia students receive foundational requisites in chemistry and physics that enable them to apply concepts, laws and theory to anesthesia practice. Each topic is brought to life through examples of how it is applied in anesthesia practice. Content includes the physics of radiology and ultrasound, and principles of radiation safety.

HNAS 711 Clinical Correlations I (2 QH)
The content of this course is integrated with the topics being presented in the concurrent HNAS 701 Principles of Anesthesia I, and HNAS 720 Advanced Nurse Anesthesia Pharmacology I courses. This course provides initial clinical correlation with didactic content, along with an introduction to clinical scenarios utilizing the human patient simulator. Students will be expected to incorporate a comprehensive, holistic approach, with culture and gender specific considerations. Students will demonstrate preoperative assessment, anesthesia care planning, and implementation and evaluation of the plan. Checkout and troubleshooting of the anesthesia machine will also be reviewed. Preparation and set up of the anesthesia workstation will be performed.

HNAS 712 Clinical Correlations II (2 QH)
The content of this course is integrated with the topics being presented in the concurrent HNAS 702 Principles of Anesthesia II, and HNAS 721 Advanced Nurse Anesthesia Pharmacology II courses. During this experience, students will continue to build upon the clinical application of didactic knowledge introduced in HNAS 711. Students will continue to incorporate a comprehensive, holistic approach, with culture and gender specific considerations. A large group
setting will be utilized in low- and high-fidelity simulation scenarios, with focus on managing various portions of anesthetic care.

**HNAS 713 Clinical Correlations III (2 QH)**
The content of this course is integrated with the topics being presented in the concurrent HNAS 703 Principles of Anesthesia III, and HNAS 722 Advanced Nurse Anesthesia Pharmacology III courses. This experience will continue to involve students in high-fidelity simulation exercises; however, participation will be in both small group settings and individually. Students will continue to incorporate a comprehensive, holistic approach, with culture and gender specific considerations. The emphasis of the experiences will focus on managing the entire anesthetic continuum, from preoperative planning to postoperative care, in preparation for transition to clinical training.

**HNAS 714 Clinical Seminar I (1 QH)**
The first part of a six part sequence. During the clinical practicum, students will return to campus one day per month for case discussions, professional presentations (provided by students and anesthesia experts), morbidity and mortality conferences, and board review activities.

**HNAS 715 Clinical Seminar II (1 QH)**
The second part of a six part sequence. During the clinical practicum, students will return to campus one day per month for case discussions, professional presentations (provided by students and anesthesia experts), morbidity and mortality conferences, and board review activities.

**HNAS 716 Clinical Seminar III (1 QH)**
The third part of a six part sequence. During the clinical practicum, students will return to campus one day per month for case discussions, professional presentations (provided by students and anesthesia experts), morbidity and mortality conferences, and board review activities.

**HNAS 717 Clinical Seminar IV (1 QH)**
The fourth part of a six part sequence. During the clinical practicum, students will return to campus one day per month for case discussions, professional presentations (provided by students and anesthesia experts), morbidity and mortality conferences, and board review activities.

**HNAS 718 Clinical Seminar V (1 QH)**
The fifth part of a six part sequence. During the clinical practicum, students will return to campus one day per month for case discussions, professional presentations (provided by students and anesthesia experts), morbidity and mortality conferences, and board review activities.

**HNAS 719 Clinical Seminar VI (1 QH)**
The sixth part of a six part sequence. During the clinical practicum, students will return to campus one day per month for case discussions, professional presentations (provided by students and anesthesia experts), morbidity and mortality conferences, and board review activities.

**HNAS 720 Advanced Nurse Anesthesia Pharmacology I (2 QH)**
The first part of a course taken over three quarters, covers the pharmacokinetic and pharmacodynamic principles of drugs, which are most commonly utilized in an anesthetic practice. Content of this course is integrated with the topics being covered in the Principles of Anesthesia course series. Drug categories that are covered include intravenous induction agents, benzodiazepines, inhalational anesthetics, opioids and neuromuscular blockers. Also covered are other commonly prescribed drug categories that have significant implications to anesthesia.
practice, as well as alternative medications, and illegal drugs, with a focus on their anesthetic implications.

**HNAS 721 Advanced Nurse Anesthesia Pharmacology II (2 QH)**
The second part of a course taken over three quarters, covers the pharmacokinetic and pharmacodynamic principles of drugs, which are most commonly utilized in an anesthetic practice. Content of this course is integrated with the topics being covered in the Principles of Anesthesia course series. Drug categories that are covered include intravenous induction agents, benzodiazepines, inhalational anesthetics, opioids and neuromuscular blockers. Also covered are other commonly prescribed drug categories that have significant implications to anesthesia practice, as well as alternative medications, and illegal drugs, with a focus on their anesthetic implications.

**HNAS 722 Advanced Nurse Anesthesia Pharmacology III (2 QH)**
The third part of a course taken over three quarters, covers the pharmacokinetic and pharmacodynamic principles of drugs, which are most commonly utilized in an anesthetic practice. Content of this course is integrated with the topics being covered in the Principles of Anesthesia course series. Drug categories that are covered include intravenous induction agents, benzodiazepines, inhalational anesthetics, opioids and neuromuscular blockers. Also covered are other commonly prescribed drug categories that have significant implications to anesthesia practice, as well as alternative medications, and illegal drugs, with a focus on their anesthetic implications.

**HNAS 725 Advanced Health Assessment (4 QH)**
Advanced physical assessment builds upon the basic assessment techniques learned at the undergraduate level in order to prepare the nurse anesthesia student to perform a comprehensive history and physical exam as well as a routine preoperative anesthesia assessment. Instruction is also provided in critical thinking and differential diagnosis. This course utilizes weekly classroom instruction, classroom case study application and physical exam lab practicum. Students are required to satisfactorily complete a comprehensive, standardized preoperative physical exam demonstration at the culmination of the course.

**HNAS 752 Advanced Physiology and Pathophysiology I (5 QH)**
In this course, students receive the foundational requisites in organ specific physiology and pathophysiology. Course instruction begins at the cellular level, including the genetic basis of disease, and advances to include a review of various organ systems’ functions and disease states.

**HNAS 753 Advanced Pharmacology I (3 QH)**
With content integrated with that of HNAS 752, this course provides a comprehensive review of the pharmacology agents commonly used to treat human disease.

**HNAS 754 Advanced Physiology and Pathophysiology II (5 QH)**
In this course, students receive the foundational requisites in organ specific physiology and pathophysiology. Course instruction begins at the cellular level, including the genetic basis of disease, and advances to include a review of various organ systems’ functions and disease states.

**HNAS 755 Advanced Pharmacology II (3 QH)**
With content integrated with that of HNAS 754, this course provides a comprehensive review of the pharmacology agents used to treat human disease.
HNAS 810 Clinical Residency I (12 QH)
Students are supervised by CRNAs and anesthesiologists at a variety of clinical sites and have opportunities to synthesize and apply previous learning. Students must maintain professionalism and be open to various teaching styles and learning experiences. It is expected that the student will remain with cases in progress through their conclusion. There will be a monthly clinical correlation conference (HNAS 714) to review clinical experiences and conduct case discussions.

HNAS 820 Clinical Residency II (12 QH)
During this quarter, students continue rotations contingent on documented progress in daily clinical evaluations. Students are supervised by CRNAs and anesthesiologists and have opportunities to synthesize and apply previous learning. Students must maintain professionalism and be open to various teaching styles and learning experiences. It is expected that the student will remain with cases in progress through their conclusion. There is a monthly clinical correlation conference (HNAS 715) to review clinical experiences and conduct case discussions.

HNAS 830 Clinical Residency III (10 QH)
Students continue rotations at clinical sites contingent on documented progress in daily clinical evaluations. Students will be supervised by CRNAs and anesthesiologists and have opportunities to synthesize and apply previous learning. Students must maintain professionalism and be open to various teaching styles and learning experiences. It is expected that the student will remain with cases in progress through their conclusion. There will be a monthly clinical correlation conference (HNAS 716) to review clinical experiences and conduct case discussions.

HNAS 840 Clinical Residency IV (12 QH)
Students continue rotations at clinical sites contingent on documented progress in daily clinical evaluations. Students will be supervised by CRNAs and anesthesiologists and have opportunities to synthesize and apply previous learning. Students must maintain professionalism and be open to various teaching styles and learning experiences. It is expected that the student will remain with cases in progress through their conclusion. There will be a monthly clinical correlation conference (HNAS 717) to review clinical experiences and conduct case discussions.

HNAS 850 Clinical Residency V (12 QH)
Students continue rotations at clinical sites contingent on documented progress in daily clinical evaluations. Students are supervised by CRNAs and anesthesiologists and will have opportunities to synthesize and apply previous learning. Students must maintain professionalism and be open to various teaching styles and learning experiences. It is expected that the student will remain with cases in progress through their conclusion. There will be a monthly clinical correlation conference (HNAS 718) to review clinical experiences and conduct case discussions.

HNAS 860 Clinical Residency VI (11 QH)
Students continue rotations at clinical sites contingent on documented progress in daily clinical evaluations. Students are supervised by CRNAs and anesthesiologists and will have opportunities to synthesize and apply previous learning. Students must maintain professionalism and be open to various teaching styles and learning experiences. It is expected that the student will remain with cases in progress through their conclusion. There will be a monthly clinical correlation conference (HNAS 719) to review clinical experiences and conduct case discussions.

HNAS 901 Translational Research I (3 QH)
This course focuses on the methodological basis for translational research, for the purpose of improving the efficiency and effectiveness of clinicians in diverse practice settings through
clinical evaluation, synthesis, transference, and application of appropriate evidence-based findings. This course provides an overview of frequently used descriptive and inferential biostatistical methods as well as the introduction to translational research evaluation. The course includes application of the theories of measurement, statistical inference and decision trees, contributing to better clinical decisions and improved patient care outcomes. Students will learn to critically appraise primary research as an important step in evidence translation. This course will train students to understand and evaluate diverse quantitative and qualitative research designs while developing analysis strategies to determine research strength and applicability. Emphasis will be placed on evaluating design, methodology, and statistical inference measures to grade and understand healthcare research.

**HNAS 902 Translational Research II (3 QH)**
Building upon the content provided in HNAS 901, this course is designed to develop student knowledge and skills regarding the evaluation, translation and integration of published research results into clinical practice. Students will learn how to: (1) conceptually frame clinical practice problems; (2) transform these identified problems into answerable research questions; (3) search for the best clinical evidence; (4) assess the clinical evidence utilizing scientific, biostatistical and epidemiologic principles; and (5) integrate the research results in a culturally competent manner. Knowledge and skills regarding the critical appraisal and synthesis of research will foster the student’s understanding of models used for the evidence-based practice of nurse anesthesia.

**HNAS 904 Entry-Level Doctoral Project Planning I (2 QH)**
This introductory course focuses on the beginning planning stages of undertaking a doctoral project. Guided by course faculty, students will develop a research question, or problem statement, that demonstrates significance in the field of anesthesiology. Students will determine which project type best suits their research focus: E-portfolio, faculty supervised research, or a Joanna Briggs Institute (JBI) Systematic Review. Students will search the literature for evidence to support the project and develop a Doctoral Project Prospectus. A thorough literature review will be required to demonstrate feasibility of the project.

**HNAS 905 Entry-Level Doctoral Project Planning II (2 QH)**
A continuation of HNAS 904, students will undertake key activities to complete a comprehensive Doctoral Project Proposal. Depending on the project type (E-portfolio, faculty supervised research, or Joanna Briggs Institute Systematic Review) students will complete a needs assessment, SWOT analysis, identify a model to support evidence translation, identify necessary resources, plan for change management, and determine methods for project evaluation. Students will be assigned a doctoral project advisor during this quarter, and will be expected to create a shared drive for ongoing collaboration on their project. Students will begin the institutional and university IRB processes, if necessary.

**HNAS 910 Health Policy, Economics and Finance (3 QH)**
The content in this course will equip the student with the knowledge and skills needed to evaluate how public policy-making strategies impact the financing and delivery of healthcare services. The student will learn to apply methods of policy analysis to policies of relevance to their practice setting, and to use the results to advocate for policy change. Content includes the knowledge and skills needed for students to analyze business practices encountered in the nurse anesthesia delivery setting. Theory and application are integrated throughout the course,
particularly related to development of cost/benefit analysis and the long-term financial impact of practice changes.

**HNAS 911 Professional Dissemination Skills (2 QH)**
This course is designed to provide content necessary for professional presentation and scholarly dissemination of knowledge. Students will demonstrate the ability to inform the public of the role and practice of the doctoral-prepared CRNA and represent themselves in accordance with the Code of Ethics for CRNAs.

**HNAS 912 Leadership, Quality/Safety and Outcomes Management (3 QH)**
Leadership theories and principles are analyzed and applied to the management of complex leadership situations in healthcare. Students will participate in assessing and improving the effectiveness of their leadership style and emotional intelligence. This course explores the theoretical basis of human error, patient safety and quality improvement activities in patient care. It introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, interprofessional practice, and evidence-based quality improvement management models. An emphasis is placed on acquiring and demonstrating the skills needed to utilize data for ethical healthcare decision-making through the process of outcomes management. Course content will also include integration of informatics to support culturally responsive, evidence-based practice at a leadership level.

**HNAS 913 Professional Role Transition (1 QH)**
This course provides the entry-level nurse anesthesia student with information critical to their successful transition into practice. Content includes: (1) professional etiquette and professional responsibilities related to interviews/offers of employment/references/credentialing; (2) negotiation of employment contracts; (3) legal, ethical and professional implications of common employment relationships and (4) workplace culture.

**HNAS 914 Legal Realities of Practice (2 QH)**
This course incorporates the application of research to the prevention of patient harm. Actual medical malpractice cases are analyzed and discussed for the purpose of demonstrating how violations of standards of patient care can lead to injury and even patient death.

**HNAS 915 Completion-Level Doctoral Project Planning I (1 QH)**
This introductory course focuses on the beginning planning stages of undertaking a doctoral project. Guided by course faculty, students will develop a research question, or problem statement, that demonstrates significance in the field of anesthesiology. Students will search the literature for evidence to support the project and develop a Doctoral Project Prospectus. A thorough literature review and SWOT analysis will be required to demonstrate feasibility of the project. Acceptance of the Doctoral Project Topic Approval Form by the course director is required.

**HNAS 916 Completion-Level Doctoral Project Planning II (1 QH)**
A continuation of HNAS 915, students will undertake key activities to complete a comprehensive Doctoral Project Proposal. Students will conduct a needs assessment, develop planning models, identify resources to facilitate project implementation, and formulate a plan for project evaluation using key indicators.
HNAS 917 Completion-Level Doctoral Project Planning III (2 QH)
A continuation of the work done in HNAS 915 and 916, students will accomplish key activities to complete their Doctoral Project Proposal. Students will engage necessary resources within the local context of the doctoral project, enroll a project facilitator, and develop a plan to manage change. A doctoral project advisor will be assigned during this quarter. Students will begin the institutional and university IRB processes and present their doctoral proposal during an in-person presentation to core faculty and invited guests.

HNAS 921 Entry-Level Doctoral Immersion Residency I (3 QH)
This course series (HNAS 921-922-923) focuses on specific aspects of the implementation of an evidence-based doctoral project. Guided by faculty and their Doctoral Project Advisor, students undertake key activities outlined in their project proposal. Activities may include (depending on project type): a systematic literature review, data collection, and stakeholder engagement. The student will complete the requirements of this course series within the domain of patient care, leadership/management, education or health care/public policy advocacy. Students will also continue to populate their portfolio with work demonstrating attainment of clinical residency goals such as reflective writing assignments, self-evaluations, and clinical evaluation documentation from preceptors.

HNAS 922 Entry-Level Doctoral Immersion Residency II (3 QH)
A continuation of HNAS 921, students will proceed with implementation of their doctoral project proposal. Activities may include (depending on project type): development of a data matrix or evidence table, contextual implementation steps, and ongoing data collection. Students will also continue to populate their portfolio with work demonstrating attainment of clinical residency goals such as reflective writing assignments, self-evaluations, and clinical evaluation documentation from preceptors.

HNAS 923 Entry Level Doctoral Immersion Residency III (4 QH)
A continuation of HNAS 922, students will complete the implementation of their doctoral project and begin writing their final manuscript. Activities include finalizing implementation steps at the local level and synthesis of evidence into a draft of a manuscript. Students will also continue to populate their doctoral portfolio with work demonstrating attainment of clinical residency goals such as reflective writing assignments, self-evaluations, and clinical evaluation documentation from preceptors.

HNAS 927 Completion-Level Doctoral Immersion Residency I (3 QH)
This course series (HNAS 927-928-929) focuses on specific aspects of the implementation of an evidence-based doctoral project. Guided by faculty and their Doctoral Project Advisor, students undertake key activities outlined in their project proposal within the domain of patient care, leadership, change management, education or health care policy advocacy.

HNAS 928 Completion-Level Doctoral Immersion Residency II (3 QH)
A continuation of HNAS 927, students will proceed with implementation of their evidence-based doctoral project. Activities may include contextual implementation steps, change management, project management, and ongoing data collection. Students will collaborate with the Doctoral Project Advisor and on-site facilitator to ensure project completion.

HNAS 929 Completion-Level Doctoral Immersion Residency III (4 QH)
A continuation of HNAS 928, students will complete the implementation of their doctoral project, finalize data collection, and begin writing their final manuscript. Activities include steps
to conclude the implementation phase at the local level and synthesis of evidence and findings into a draft of a manuscript. Students will collaborate with the Doctoral Project Advisor and on-site facilitator to ensure project completion.

**HNAS 931 Entry-Level Doctoral Project I (3 QH)**
The doctoral program culminates with the completion of a scholarly work that demonstrates the ability to critically evaluate research and translate findings into practice. This is an opportunity for the student to prepare a substantial final written work product that reflects the breadth of skills and knowledge the student has gained throughout the program of study. The Doctoral Project Guide for Entry-Level DNP students provides information regarding the project, as well as key deadlines associated with each project item.

**HNAS 932 Entry-Level Doctoral Project II (3 QH)**
A continuation of HNAS 931, this course builds upon the final doctoral manuscript by guiding the student through dissemination of their findings. Dissemination of the results of the doctoral project will be accomplished through submission for professional publication, presentation at an industry meeting, or poster session presentation at a University event. In addition to the final work product, students will complete the remaining requirements of their portfolio of work, which demonstrates competency in all areas of didactic preparation, clinical training, and doctoral scholarship. The Doctoral Project Guide for Entry-Level DNP students provides information regarding the project requirements, as well as key deadlines associated with each project item.

**HNAS 938 Completion-Level Doctoral Project I (3 QH)**
The doctoral program culminates with the completion of a scholarly work that demonstrates the ability to identify a problem, critically evaluate evidence to support a practice change, develop an evidence-based project that translates findings into practice, and evaluate the impact of that change. This is an opportunity for the student to prepare a substantial final written work product that reflects the breadth of skills and knowledge the student has gained throughout the program of study. The Doctoral Project Guide for Completion-Level DNP students provides information regarding the project requirements, as well as key deadlines associated with each project item.

**HNAS 939 Completion-Level Doctoral Project II (3 QH)**
A continuation of HNAS 938, this course builds upon the final doctoral manuscript by guiding the student through dissemination of their findings. Dissemination of the results of the doctoral project will be accomplished through submission for professional publication, presentation at an industry meeting, or poster session presentation at a University event. The Doctoral Project Guide for Completion-Level DNP students provides information regarding the project requirements, as well as key deadlines associated with each project item.

**HNAX 504 same as HHCM 507**
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HNAX 520 same as HHCM 551
HNAX 521 same as HHCM 560
HNAX 529A & B same as HIPS 515A & B
HNAX 537 same as HPOP 508
HNAX 540 same as HPOP 540
HNAX 541 same as HPOP 541
HNAX 563 same as MCBA 501
HNAX 568 same as HNUT 504
HNAX 569 same as HNUT 505
HNAX 570 same as HNUT 510
HNAX 572 same as HNUT 513
HNAX 574 same as HNUT 541
HNAX 575 same as HNUT 542
HNAX 576 same as HNUT 576
HNAX 625 same as HHCM 630

HNUT 504 Health and Information Literacy for Healthcare Professionals (3 QH)
This course introduces students to the skills and techniques needed to become an information-literate individual. Students will have the opportunity to acquire and practice the following: identifying the topic of interest or developing a research question; acquiring knowledge through the efficient use of current technologies, such as online and electronic resources; establishing evaluation criteria for information resources; evaluating and integrating the acquired information to answer the original query/research question, while complying with copyright laws/guidelines and effectively communicating this information, through an appropriate medium, to the target audience in an ethical and legal manner. In addition, students will explore the impact of health literacy on patient care and health outcomes and will acquire the skills needed to assist them in translating information about diseases and their treatments into a language that healthcare consumers can understand.

HNUT 505 Communication Strategies, Methods and Techniques (3 QH)
This course targets strategies, methods and techniques to enhance the effectiveness of professional and client-centered communications. Translation of evidence-based science into
layman’s terms will be emphasized. Use of social media, media training and how to promote oneself as a nutrition professional will be included.

**HNUT 506 Health Education Teaching Experience (1 QH)**
The purpose of this course is to give the student the opportunity to experience a teaching role. Students will plan, deliver and evaluate a learning module in a prevention, health and/or wellness area of their choice.

**HNUT 510 Modern Nutrition (3 QH)**
This course provides an in-depth overview of human nutrition including the processes of digestion, absorption, transportation and excretion of food and nutrients; the structure, function, metabolism, requirements, deficiencies, and toxicities of protein, carbohydrate, fat, vitamins, minerals, trace minerals and ultra-trace minerals; and the fundamental principles of energy metabolism and fluid, electrolyte and acid-base balance.

**HNUT 511 Advanced Nutrition and Chronic Diseases (4 QH)**
This course gives a clinical analysis of the pathophysiological and metabolic basis for nutritional management in the prevention and treatment of chronic diseases impacting the population, including diabetes, heart disease, obesity, cancer and osteoporosis.

**HNUT 513 Health and Wellness Coaching (3 QH)**
This course builds on basic counseling skills to include health coaching techniques. The student will learn how to take a guiding role in empowering clients to choose a healthy lifestyle. Acting as a client-centered health coach and empowering the clients to become the expert in determining their own wellness goals and plans, the student will practice motivational interviewing and other techniques to reach these ends.

**HNUT 526 Evaluating Research and Health Recommendations (4 QH)**
This course introduces the fundamentals of the research process through the evaluation of published clinical research studies with the desired end result being the ability to critically analyze and interpret research findings and health recommendations. From an evidence-based perspective, students will select, interpret, analyze, synthesize and then summarize relevant research studies using peer-reviewed articles, write a brief literature review and develop a hypothesis for future investigation. A process for evidence-based review and analysis of current recommendations for management, treatment and prevention of disease will be introduced. This course also includes a journal club discussion in which weekly learning objectives are reinforced with practical and applicable examples from current scientific literature.

**HNUT 541 Prevention, Health Promotion and Wellness (3 QH)**
This course explores health promotion for the individual and the community. This will be accomplished through implementing basic community health concepts of epidemiology, levels of prevention and risk assessment within the context of health promotion activities. Students will analyze their own personal health promotion needs and selected needs within a chosen community. Based on the standards outlined in Healthy People 2030, students will develop health promotion activities for community health problems of their choice based on an assessment of need. Students will develop, track and analyze an individual health promotion plan for themselves.
HNUT 542 Complementary Medicine and Dietary Supplements (3 QH)
This course is an overview of complementary and alternative medicine (CAM) that includes alternative medical systems, holistic, integrative, mind-body interventions and biologically based therapies including a variety of herbs and dietary supplements such as botanicals, vitamins and minerals. The regulatory policies relating to safety of the therapies will be discussed. An evidence-based process will be used to analyze associated benefits and regulatory concerns.

HNUT 554 Nutrition in Critical Care (3 QH)
This course offers an in-depth review of the theory and application of the forms and components of specialized nutrition support in the treatment of various disease conditions.

HNUT 555 Nutrition in the Lifecycle (3 QH)
This course is an overview of the nutritional requirements and concerns specific to the different stages of the lifecycle. Scientific evidence relating to nutritional recommendations will be applied to prevention, health promotion and wellness activities.

HNUT 576 Nutrition and Human Physical Performance (3 QH)
This course focuses on the role of nutrition in the physiological and metabolic responses of the body to a wide range of physical activity. Macronutrient, micronutrient and fluid needs associated with physical activity and the nutritional needs of special athletic populations will be addressed. Topics such as the role of physical activity in the prevention of disease and the promotion of health and wellness, the use of supplements in athletes and exercise prescription for health conditions will also be discussed.

HNUT 582 Independent Study (1-3 QH)
The independent study is an individualized learning experience designed to meet the specific educational needs of the student.

HNUT 596 Portfolio Evaluation (2-3 QH)
The Master of Science in Nutrition degree focuses on five competency areas: nutrition and health promotion knowledge, education, critical thinking and research evaluation, professional communication and leadership. Achievement of specific learning objectives in these areas of competency will be demonstrated by the student through development of artifacts during the course of their degree program. These artifacts will be part of a required portfolio that will be evaluated by the student and a faculty committee. By the end of the course, students will have compiled a final collection of artifacts with analysis and reflections for each. Portfolio Evaluation is the final degree requirement for all students in the Master of Science in Nutrition program. Students will enroll in this course after all other course requirements are completed. A modified portfolio will be prepared by students who did not prepare artifacts as part of the required coursework.

HNUX 500 same as HHPE 535
HNUX 504 same as HHCM 507
HNUX 507 same as HHCM 511
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HNUX 526 same as HHPE 510
HNUX 527 same as HHPE 512
HNUX 530 same as HIPS 561
HNUX 540 same as HPOP 540
HNUX 541 same as HPOP 541
HNUX 586 same as HHPE 530
HNUX 590 same as HHPE 540
HNUX 591 same as HHPE 580
HNUX 593 same as HLSM 500
HNUX 594 same as HLSM 501
HNUX 625 same as HHCM 630
HNUX 628 same as HHPE 602
HNUX 685 same as MCSC 602
HNUX 695 same as HLSM 600
HNUX 696 same as HLSM 601
HNUX 780 same as YELP 708

HPAS 500 Physician Assistant Professional Issues and Ethics (2 QH)
This course is designed to familiarize the student with the history and traditions of the PA Profession. This is complemented by a focused review of current philosophies, policies, and ethical issues in contemporary health care targeted at the health care professional.

HPAS 501 General Medicine and Infectious Disease I (9 QH)
The first in the series of three courses, is an introduction to the principles essential to physician assistant practice. Using a systems-oriented approach, the course will cover the etiology, pathophysiology, clinical presentation, diagnostic evaluation, prevention, and medical and surgical management principles of diseases. Course content will be rooted in evidence-based recommendations and a collaborative approach to patient-centered care.

HPAS 502 Introduction to EKG (2 QH)
This course provides students with a systematic method of interpreting a 12-lead EKG with respect to rate, rhythm and blocks, electrical axis determination, hypertrophy, ischemia, injury, infarction, and miscellaneous drug, electrolyte, disease and pacemaker effects.

HPAS 510 General Medicine and Infectious Disease II (9 QH)
The second in the series of three courses, is an introduction to the principles essential to physician assistant practice. Using a systems-oriented approach, the course will cover the etiology, pathophysiology, clinical presentation, diagnostic evaluation, prevention, and medical
and surgical management principles of diseases. Course content will be rooted in evidence-based recommendations and a collaborative approach to patient-centered care.

HPAS 512 Clinical Decision-Making I (1 QH)
This course will provide the PA student with the proper techniques for obtaining a medical interview and for documenting the medical record. Utilizing case studies, this course teaches the systematic approach to the assessment and management of clinical problems, including ordering appropriate diagnostic studies, developing a differential diagnosis, formulating a treatment plan, and describing disease prognosis. This is the first of three clinical problem-solving courses.

HPAS 513 Physical Assessment (4 QH)
This course will teach students the skills required to perform and document a complete adult physical examination (PE). The course is presented on an organ-system basis with emphasis placed on recognizing normal PE findings as the basis for discerning and identifying pathologic findings. The course will also discuss the correlation between abnormal PE findings to causative disorders. Students will learn to accurately record PE findings as part of a complete history and physical document.

HPAS 515 Psychosocial Aspects of Patient Care (1 QH)
Each encounter between a patient and a healthcare provider brings lifelong and immediate psychosocial elements to the interaction. This experience draws from a variety of patient-related and practitioner-related factors including, but not limited to, each participant's personality and previous experiences, their concepts of health and disease, their familial and social environment, and their culture, race and ethnicity, and language. This course aims to expand the student’s awareness of psychological and sociological aspects that operate in the relationship of patient and physician assistant. In this course students investigate the contextual setting of medical practice, the patient as a person, and the physician assistant’s psychosocial considerations during patient assessment and treatment.

HPAS 518 Emergency Medicine (2 QH)
This course introduces the student to the basic principles of emergency medicine, including the PAs role in triage, assessment and emergency management of commonly encountered medical and surgical. Using a complaint-oriented approach, lectures will discuss the etiology, pathophysiology, clinical presentation, diagnosis and management of various diseases and disorders in the setting of an Emergency Department. The student will be required to use knowledge gained from previous courses in the PA curriculum to understand and synthesize material presented in this course.

HPAS 519 Obstetrics and Gynecology (3 QH)
This course will introduce physician assistant students to the fundamentals of Obstetrics and Gynecology. Lecture and discussions will focus on 1) the review of female anatomy and reproductive physiology, 2) the introduction to normal physiology of reproduction and pregnancy, 3) the approach to the routine prenatal and gynecologic office visit, and 4) the description of common obstetrical and gynecologic conditions and disorders. This course will provide the basic foundation for the clinical approach to patient evaluation, diagnosis, and treatment for students’ women’s health clinical rotation during the second year of physician assistant curriculum.
HPAS 520 General Medicine and Infectious Disease III (8 QH)
The third in the series of three courses, is an introduction to the principles essential to physician assistant practice. Using a systems-oriented approach, the course will cover the etiology, pathophysiology, clinical presentation, diagnostic evaluation, prevention, and medical and surgical management principles of diseases. Course content will be rooted in evidence-based recommendations and a collaborative approach to patient-centered care.

HPAS 522 Clinical Decision-Making II (2 QH)
This course will provide the PA student with the proper techniques for obtaining a medical interview and for documenting the medical record. Utilizing case studies, this course teaches the systematic approach to the assessment and management of clinical problems, including ordering appropriate diagnostic studies, developing a differential diagnosis, formulating a treatment plan, and describing disease prognosis. This is the second of three clinical problem-solving courses as described above.

HPAS 523 Clinical Procedures (3 QH)
This course covers the indications, contraindications, step-by-step procedures, and potential complications of multiple hands-on skills that are commonly performed by physician assistants in clinical practice. Examples of skills include: phlebotomy, injections, intravenous therapy, urethral and nasogastric catheterization, suturing, casting/splinting, and practice scrubbing, gowing and gloving for surgery. In addition, students will be required to successfully complete the Basic Life Support and Advanced Cardiac Life Support (BLS & ACLS) training course.

HPAS 525 Geriatrics (2 QH)
This course introduces the student to the principles of Geriatric Medicine with an emphasis on the normal changes of aging, clinical implications of the aging process, and recognizing, assessing and treating medical problems common to the geriatric population in a compassionate and empathetic manner.

HPAS 528 Research and Statistics (2 QH)
The purpose of this course is to give PA students a broad introduction to research and statistics, with the goal of making them intelligent consumers of published research who can practice evidenced-based medicine. Students will learn how to identify and design high-quality research projects, as well as how to correctly analyze the results and draw appropriate conclusions. Students will also practice reviewing and critiquing recent research articles that are relevant to the PA profession.

HPAS 532A, B & C Interprofessional Case Collaborations (3 QH)
The purpose of this interactive course is to expose students to a collaborative, interprofessional, team-based approach to healthcare. The concepts covered via clinical vignettes will include concepts of pathophysiology, clinical presentation, diagnostic techniques, and medical management and treatment. This course will also provide guidance and reinforcement of key concepts relevant to patient-centered care as students work in a team-based setting. Relevant interprofessional objectives and competencies will be addressed throughout the course.

HPAS 537 Population Medicine (2 QH)
This course introduces the concepts of population medicine such as public health, epidemiology, health education, community-oriented primary care, prevention, advocacy and disparities in health care. The student will explore the connections between clinical and population medicine with emphasis on disease prevention and health promotion.
HPAS 538 Introduction to Clinical Medicine for the Physician Assistant (2 QH)
Introduction to Clinical Medicine for the Physician Assistant (PA) is a two-credit hour course that will provide basic concepts of general medicine, surgery, infectious disease, and clinical laboratory medicine. The course will cover the history of medicine as applied to current practice, the nature of disease and illness, the basics of microbiology and clinical laboratory medicine as applied to patient evaluation and management.

HPAS 539 Introduction to Pharmacotherapy (1 QH)
Introduction to Pharmacotherapy will provide the foundational knowledge necessary to understand general pharmacotherapy principles and practice. The course will cover basic pharmacodynamics and pharmacokinetics concepts and applications, medication safety, health literacy, and an overview of over-the-counter drugs and antibiotic therapy. This course provides the foundation for the Pharmacotherapy course series (HPAS 600, HPAS 610, and HPAS 620) that provides the core pharmacology-related knowledge in the PA didactic year curriculum.

HPAS 540 Pediatrics (2 QH)
This course is an introduction to the fundamentals of pediatric medicine, covering the age span from neonate through adolescent. Course content covers principles of etiology, pathophysiology, clinical presentation, diagnostic evaluation, and medical and surgical management principles of diseases, as well as well-child care, pediatric growth and development in the context of family education, screening, and prevention.

HPAS 542 Clinical Decision-Making III (2 QH)
This course will provide the PA student with the proper techniques for obtaining and documenting a medical interview, physical examination, and clinical decisions for a variety of clinical scenarios. Utilizing case studies, this course teaches the systematic approach to the assessment and management of clinical problems, including ordering appropriate diagnostic studies, developing a differential diagnosis, formulating a treatment plan, and describing disease prognosis. This is the third of three clinical problem-solving courses as described above.

HPAS 550 Internal Medicine (6 QH)
Six-week clerkship in an Internal Medicine setting. Clerkships are designed to provide a range of experiences with adult and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the Internal Medicine scope of practice.

HPAS 551 Leadership in the Healthcare Environment (2 QH)
This inter-professional course is designed to introduce the student to the concept of leadership within the healthcare environment. The course begins with an overview of leadership styles, and then continues with more specific topics such as building teams, evaluating others, managing finances, managing risk, marketing of healthcare, and healthcare policy.

HPAS 560 General Surgery (6 QH)
Six-week clerkship in a General Surgery setting. Clerkships are designed to provide a range of pre-operative, intra-operative, and post-operative experiences that can include children, adolescents, adult and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the General Surgery scope of practice.
HPAS 565 Family Medicine (6 QH)
Six-week clerkship in a Family Medicine setting. Clerkships are designed to provide a range of experiences with infant, children, and adolescent, adult, and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the Family Medicine scope of practice.

HPAS 570 Women’s Health (6 QH)
Six-week clerkship in a Women’s Health setting. Clerkships are designed to provide a range of experiences with adolescent, adult, and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the Women’s Health scope of practice.

HPAS 575 Pediatrics (6 QH)
Six-week clerkship in a Pediatric Medicine setting. Clerkships are designed to provide a range of experiences with infant, children, and adolescent patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the Pediatric Medicine scope of practice.

HPAS 580 Emergency Medicine (6 QH)
Six-week clerkship in an Emergency Medicine setting. Clerkships are designed to provide a range of experiences with infant, children, adolescent, adult, and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the Emergency Medicine scope of practice.

HPAS 591 Elective Rotation I (6 QH)
Six-week clerkship in an Elective Rotation setting. Clerkships are designed to provide a range of experiences that can include infant, children, adolescent, adult, and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the selected Elective Rotation scope of practice.

HPAS 592 Elective Rotation II (6 QH)
Six-week clerkship in an Elective Rotation setting. Clerkships are designed to provide a range of experiences that can include infant, children, adolescent, adult, and geriatric patients under the supervision of a clinician. Emphasis is placed on prevention, history-taking, performing physical examinations, ordering diagnostic studies, determining diagnoses, developing management plans, and performing procedures within the selected Elective Rotation scope of practice.

HPAS 600 Pharmacotherapy I (4 QH)
This course is a study of the principles of drug therapy essential to the clinical practice of pharmacy integrating both basic and clinical science applications. Topics presented include an overview of pertinent epidemiology, pathophysiology, clinical presentation, diagnostics, and general pharmacotherapeutic management of covered diseases. Each topic will focus on using evidence-based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe and cost-conscious manner.
HPAS 610 Pharmacotherapy II (4 QH)
This course is a study of the principles of drug therapy essential to the clinical practice of pharmacy integrating both basic and clinical science applications. Topics presented include an overview of pertinent epidemiology, pathophysiology, clinical presentation, diagnostics, and general pharmacotherapeutic management of covered diseases. Each topic will focus on using evidence-based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe and cost-conscious manner.

HPAS 620 Pharmacotherapy III (4 QH)
This course is a study of the principles of drug therapy essential to the clinical practice of pharmacy integrating both basic and clinical science applications. Topics presented include an overview of pertinent epidemiology, pathophysiology, clinical presentation, diagnostics, and general pharmacotherapeutic management of covered diseases. Each topic will focus on using evidence-based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe and cost-conscious manner.

HPAS 646 Advanced Physical Examination (2 QH)
This course expands upon the HPAS 513 Physical Examination course, as well as the Clinical Decision-Making course series. The PA student will learn to perform focused physical examinations, exams for specific populations, and as well as specialty exams that are typically performed by PAs in clinical practice. Students will have an opportunity to perform female and male screening and genitourinary examinations with Practical Instructors.

HPAS 650 Complementary Medicine (1 QH)
This course covers the fundamentals of numerous complementary and alternative health modalities by highlighting how the physician assistant can make appropriate referrals and educate their patients on the cultural and historical backgrounds of these therapies. The student will be given the opportunity to interact with specialists in various fields of complementary medicine.

HPAS 690 Master’s Project (8 QH)
In accordance with the mission of the Rosalind Franklin University of Medicine and Science’s (RFUMS) College of Health Professions, graduates from the Physician Assistant Department will have the skills required to be both knowledgeable researchers and critical consumers of research, The Master’s Research Project provides an opportunity for students to acquire the skills to read, synthesize and critique the extant bio-medical and social science research. As practicing clinicians and scholars, these proficiencies will enhance patient care through evidence-based practice and clinically based investigations.

HPAX 529A & B same as HIPS 515A & B

HPAX 563 same as MCBA 501

HPCC 500 Research Methods for Counselors (4.5 QH)
This course provides an overview of research design issues for the counselor. A particular emphasis will be placed on the evaluation of research and applying findings to the field of professional counseling. Specific topics will include: the scientific process, reliability, validity, test construction, as well as experimental, quasi-experimental and non-experimental designs. Case studies will be used to assist the student in learning how to apply theoretical concepts to real-world research publications including research articles and test manuals.
HPCC 501 Ethical Issues and Standards for Professional Counselors (4.5 QH)
This course reviews practice standards and ethics codes as well as state and federal laws applicable to counselors. Ways to identify and resolve ethical and legal dilemmas the counselor might encounter are explored. The American Counseling Association Code of Ethics is emphasized as are the State of Illinois Counselor Licensing Act and Rules. The concept of risk management is introduced.

HPCC 502 Diagnostic Interviewing and Report Writing (4 QH)
This course reviews clinically relevant techniques for information gathering, effective listening, rapport building and the formal assessment of mental status and behavior observed during the interview process. Students will learn clinically appropriate methods of documenting information gained from the interview process. Students will learn to prepare written reports appropriate for clinical and forensic purposes.

HPCC 503 Cognitive and Behavioral Therapy – Child and Adolescent (4.5 QH)
This course will emphasize the use of empirically supported therapeutic methodologies to facilitate behavior change for a variety of clinical problems in children and adolescents. The application of different learning principles and specific techniques of therapeutic change will be covered including parent-training interventions. The student will learn to solve problems encountered in practical application of cognitive and behavioral techniques. Emphasis will be placed on methods and procedures effective in the elimination of inappropriate behaviors and the acquisition and maintenance of appropriate behaviors.

HPCC 505 Personality Assessment for Counselors (4.5 QH)
This course provides an overview of testing theory and the application of objective psychological tests for the assessment of personality and personality development. Students will learn to administer and interpret common personality inventories. Test selection and interpretation in varied clinical situations and with diverse clinical populations will be reviewed.

HPCC 600 Substance Abuse Assessment and Treatment (4.5 QH)
This course examines substance use and abuse as clinical problems. The psychological and physical effects of drug use and abuse will be examined and the process of addiction development will be explored. The role of socio-cultural factors in substance abuse and addiction will be discussed. Diagnostic criteria and empirically-based treatment approaches will be reviewed.

HPCC 601 Group Dynamics and Counseling (4.5 QH)
This course reviews the primary theoretical approaches to group therapy/counseling. Students will learn when to apply different group therapy techniques and how to address individual differences within the group therapy context.

HPCC 602 Career Counseling and Development (4.5 QH)
This course reviews career development theories and decision-making models across the lifespan. Assessment instruments and techniques will be reviewed. Emphasis will be placed on client engagement, exploration of potential, decision strategies, preparation and implementation strategies. Sources of occupational information and career guidance programs will be evaluated.

HPCC 603A Practicum/Internship and Seminar I (5 QH)
The practicum/internship is an applied professional experience in clinical counseling. The student will have the opportunity to engage in a wide variety of clinical counseling activities at
approved training sites in the community. Students will engage in clinical activities that may include, but are not limited to, performing intake assessment, conducting diagnostic interviews, providing psychotherapy or group counseling services and conducting objective cognitive, personality or career assessments. The student will work at their practicum/internship site for a minimum of 700 hours and all clinical work will be supervised on-site by a licensed mental health professional. Each quarter the student is enrolled in this course, he/she must attend a one-hour seminar held on campus. During the seminar, students will present case material from their practicum/internship experience using a clinical case presentation model. This experience will allow the students to participate in the process of giving and receiving feedback in a collegial fashion. This experience will also prepare the student to successfully complete their capstone experience that will occur in the last quarter of study before graduation.

**HPCC 603B Practicum/Internship and Seminar II (5 QH)**
The practicum/internship is an applied professional experience in clinical counseling. The student will have the opportunity to engage in a wide variety of clinical counseling activities at approved training sites in the community. Students will engage in clinical activities that may include, but are not limited to, performing intake assessment, conducting diagnostic interviews, providing psychotherapy or group counseling services and conducting objective cognitive, personality or career assessments. The student will work at their practicum/internship site for a minimum of 700 hours and all clinical work will be supervised on-site by a licensed mental health professional. Each quarter the student is enrolled in this course, he/she must attend a one-hour seminar held on campus. During the seminar, students will present case material from their practicum/internship experience using a clinical case presentation model. This experience will allow the students to participate in the process of giving and receiving feedback in a collegial fashion. This experience will also prepare the student to successfully complete their capstone experience that will occur in the last quarter of study before graduation.

**HPCX 503A & B same as HBMS 507A & B**

**HPCX 511 same as HHCM 518**

**HPCX 512 same as HHCM 519**

**HPCX 515 same as HHCM 522**

**HPCX 518 same as HHCM 525**

**HPCX 520 same as HHCM 551**

**HPCX 526 same as HHPE 510**

**HPCX 529A & B same as HIPS 515A & B**

**HPCX 530 same as HIPS 561**

**HPCX 537 same as HPOP 508**

**HPCX 538 same as HPOP 530**

**HPCX 540 same as HPOP 540**

**HPCX 541 same as HPOP 541**

**HPCX 542 same as HPSC 505**

**HPCX 543 same as HPSC 510**
HPCX 544 same as HPSC 515
HPCX 545 same as HPSC 532
HPCX 546 same as HPSC 560
HPCX 547 same as HPSC 567
HPCX 548 same as HPSC 571
HPCX 549 same as HPSC 573
HPCX 550 same as HPSC 574
HPCX 551 same as HPSC 575
HPCX 552 same as HPSC 576
HPCX 568 same as HNUT 504
HPCX 569 same as HNUT 505
HPCX 570 same as HNUT 510
HPCX 574 same as HNUT 541
HPCX 575 same as HNUT 542
HPCX 581 same as HPSC 520
HPCX 582 same as HPSC 577
HPCX 584 same as HPSC 512
HPCX 587 same as HPSC 511
HPCX 589 same as HPSC 513
HPCX 654 same as HPSC 668
HPCX 655 same as HPSC 669
HPCX 656 same as HPSC 690
HPCX 667 same as MFPM 600
HPCX 697 same as HPSC 621
HPCX 757 same as HPSC 751
HPCX 758 same as HPSC 754
HPCX 759 same as HPSC 783
HPCX 760 same as HPSC 788
HPCX 798 same as HPSC 750
HPCX 861 same as HPSC 800
HPCX 862 same as HPSC 850
**HPHW 583 Independent Study in Health Promotion and Wellness (4 QH)**
Students will apply concepts and skills gained through their coursework to the professional wellness environment in an approved, interprofessional leadership experience located within a business, institution or agency. The student is expected to complete a minimum of 120 hours within the setting, including the time needed for preliminary planning, implementing and reporting on the completed project. The final report of the completed project will be presented as part of the final Portfolio Evaluation.

**HPHW 596 Portfolio Evaluation for Health Promotion and Wellness (3 QH)**
The Master of Science in Health Promotion and Wellness degree focuses on five competency areas: application of prevention, health promotion and wellness knowledge; educating the individual, family and community on health issues; leadership in an interprofessional health and wellness environment; communicating effectively as a health professional; and demonstration of critical thinking and research evaluation. Achievement of specific learning objectives in these areas of competency will be demonstrated by the student through completion of course projects. These projects will become part of an e-portfolio that will be evaluated by the student and a faculty committee. The portfolio course is the final degree requirement and capstone experience for all students in the Master of Science in Health Promotion and Wellness program.

**HPHX 504** *same as HHCM 507*

**HPHX 507** *same as HHCM 511*

**HPHX 510** *same as HHCM 517*

**HPHX 513** *same as HHCM 520*

**HPHX 514** *same as HHCM 521*

**HPHX 515** *same as HHCM 522*

**HPHX 517** *same as HHCM 524*

**HPHX 530** *same as HIPS 561*

**HPHX 540** *same as HPOP 540*

**HPHX 541** *same as HPOP 541*

**HPHX 568** *same as HNUT 504*

**HPHX 569** *same as HNUT 505*

**HPHX 570** *same as HNUT 510*

**HPHX 572** *same as HNUT 513*

**HPHX 574** *same as HNUT 541*

**HPHX 575** *same as HNUT 542*

**HPHX 576** *same as HNUT 576*

**HPHX 583** *same as HNUT 511*

**HPHX 625** *same as HHCM 630*
HPOP 508 Health Program Planning and Evaluation (3 QH)
This course provides the theoretical foundations of public health program planning and evaluation for defined populations. Evaluation findings will be used to make recommendations for future programming or program revisions.

HPOP 509 Maternal and Child Health (3QH)
This course addresses health issues related to maternal and child health in order to provide the skills required to delineate health status and design appropriate interventions and ongoing evaluation strategies for improved health of defined communities. Socio-economic and cultural considerations as they relate to infant mortality rates and pre-natal health, will also be addressed in this course. The student will use evidence to identify health-related needs, collect appropriate data to support those defined needs, determine health disparities and identify resources to meet a set of priorities.

HPOP 510 Rural Health (3QH)
Rural health and medicine defines the complexities of health in rural America. The student will be introduced to concepts of public health challenges, and health disparities unique to rural communities, and discuss contemporary interventions to improve the health to their residents.

HPOP 511 Geriatric Health (3QH)
This course addresses the special health issues of a growing population within the continental United States. As a significant majority of our population persists and utilizes our healthcare system, policies and healthcare agencies must rally to ensure that specialized care is made available to our aging population. The student will use evidence to identify health-related needs, collect appropriate data to support those defined needs, determine health disparities and identify resources to meet a set of priorities.

HPOP 530 Research Methodology I (3 QH)
This course exposes students to both quantitative and qualitative foundations of research methods. Students engage in projects where they apply theoretical principles in applied settings. Real-life limitations to traditional research when methods are utilized in applied settings are discussed. Students will be prepared to ask and answer basic research questions.

HPOP 535 Health Economics, Policy and Advocacy (3 QH)
This course will apply the analytical tools of economics to issues in health care which are relevant to leaders of health care organizations. Topics will include the use of economic incentives to influence health behavior; asymmetric information and the role of agency in health care; the application of behavioral economics to health care; government as payer and regulator, and equity/ethical considerations; the role of health insurance; and the theory of the firm as it applies to physicians, hospitals, and systems.

HPOP 540 Essentials of Population Health (3 QH)
This course is designed as an overview of the essentials of population health practices to address the prioritized healthcare needs of populations with a goal of making recommendations to improve access to care, improve quality of care and reduce cost of care.

HPOP 541 Community Health Assessment and Intervention (3 QH)
This course addresses community health topics in order to provide the skills required to delineate health status and design appropriate interventions and ongoing evaluation strategies for improved health of a defined community. The student will use evidence to identify health-related needs,
collect appropriate data to support those defined needs, determine health disparities and identify resources to meet a set of priorities.

**HPOP 552 Independent Study in Population Health (3 QH)**
The independent study is an individualized learning experience designed to meet specific educational needs of the student.

**HPOP 590 Population Health Field Research Capstone Course (3 QH)**
Population Health students will demonstrate their achievement of course goals and objectives as well as proficiency of program competencies by preparing a final e-portfolio in the capstone course. The student will give a formal Power Point presentation about their portfolio to the program faculty.

**HPOX 504** same as **HHCM 507**
**HPOX 506** same as **HHCM 510**
**HPOX 508** same as **HHCM 515**
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**HPOX 517** same as **HHCM 524**
**HPOX 530** same as **HIPS 561**
**HPOX 625** same as **HHCM 630**
**HPOX 931** same as **HNAS 909**

**HPSC 500 Clinical Practicum Supervision (1 QH)**
Students will meet approximately twice a month for one hour with their training year peers and the Director of Clinical Training. During these meetings, students will discuss their clinical practicum experiences, simulations experiences, and learn from each other via discussion and presentations. Additional content will be covered through lectures and discussion led by the DCT. These content topics will be used to pay particular attention to helping students develop conceptualization, case formulation and treatment skills in order to enhance their clinical growth. Students will also contribute to content topics as they present issues from their practicum site that require clarification or that present difficulty.

**HPSC 501 Advanced Specialty Seminar: Psychopathology (1 QH)**
The course is designed as an advanced seminar to give students additional exposure to selected research in psychopathology with clinical implications and to improve students’ clinical skills by strengthening their case analysis abilities. Course objectives include learning current knowledge
about evidence-based treatment for specific conditions and a recognition of the limitations of current knowledge.

**HPSC 502 Advanced Specialty Seminar: Health Psychology (1 QH)**
This course is designed as an advanced seminar for students with interest in health psychology. The course will address applied clinical and research issues in the field of health psychology, using a combination of readings, student presentations and faculty presentations. Course objectives include improving student case conceptualization skills in health psychology treatment and assisting students in developing an advanced understanding of evidenced-based approaches to assessment and treatment in health psychology.

**HPSC 503 Advanced Specialty Seminar: Neuropsychology (1 QH)**
This course is designed as an advanced seminar for students with interest in neuropsychology. It covers a broad range of topics including professional development, issues relevant to the changing dynamics of clinical neuropsychology in clinical practice and research, use of tests and procedures in clinical practice, and neuropsychological features of both pediatrics and adult populations.

**HPSC 505 Psychological Trauma: Assessment and Treatment (3 QH)**
This course will introduce students to current trauma theory and important issues within this field. Instruction will begin broadly and will move toward more focused areas with the field of child, adolescent, and adult trauma. These focused areas include: simple vs. complex PTSD, Polyvictimization, Adverse Child Events, Trauma-focused Assessment, Phase-based Trauma Treatment, Vicarious Trauma and Burnout, Traumatic Loss and Community Violence.

**HPSC 510 Psychological Statistics I (5 QH)**
This course is an introduction to the methods of modern statistical analysis and its use in drawing conclusions from data collected in surveys and in the laboratory. Topics covered include descriptive statistics, probabilities, confidence interval estimation of population parameters, tests of significance, correlation and regression, and analysis of variance.

**HPSC 511 Psychological Statistics II (4 QH)**
This course covers correlational techniques, partial correlation, regression analysis, analysis of variance, simple and complex experimental design, analysis of covariance and multivariate analysis.

**HPSC 512 Longitudinal Models (4 QH)**
This course will focus on statistical analysis of longitudinal data common in psychological research. Focus will be on longitudinal structural equation modeling. Topics may include measurement invariance, growth curves, latent difference score models, dynamic factor analysis, and multilevel structural equation models. Use of software (e.g., Mplus, R) is required, but no background in software is assumed.

**HPSC 513 Categorical Models (4 QH)**
This course is focused on statistical analysis of categorical data. We will start with logistic regression and look in-depth at ordinal and nominal logistic models. We will proceed through taxometric methods (e.g., MAMBAC, MAXEIG, L- Mode). Finally, we will deal with latent variable models - specifically, latent class analysis and latent profile analysis. If time permits, growth mixture models will also be discussed. Use of software (e.g., Mplus, R) is required, but no background in software is assumed.
HPSC 515 Experimental Design and Program Evaluation (4 QH)
This course provides an overview of research design in psychology with emphasis both on the implementation and the evaluation of psychological research studies. Specific topics include: the scientific process, external validity, construct validity, internal validity, experimental, quasi-experimental and non-experimental designs and conclusion validity. The goal is to establish a firm foundation in the fundamentals of research design that will allow students to both design their own research projects as well as critically evaluate studies in the psychological literature.

HPSC 520 Descriptive Psychopathology (4.5 QH)
This course presents an in-depth analysis of the DSM-V diagnostic criteria for major categories of psychopathology. The concepts of mental illness in general, as well as specific categories of mental illness such as schizophrenia, affective disorders, anxiety disorders, organic brain disease and personality disorders are covered. This course also introduces the concept of the role of mental status and behavioral observations as part of the diagnostic formulation.

HPSC 521 Theoretical Psychopathology (3 QH)
In-depth analysis of contemporary, psychosocial, cognitive and biological theories concerning the major forms of psychopathology. Emphasis is placed on recent empirical findings regarding the etiology of mental disorders.

HPSC 532 Introduction to Pediatric/Child Neuropsychology (2 QH)
This course provides basic introduction to the field of pediatric/child neuropsychology. Broad aspects of brain development/plasticity will be presented followed by discussion of more practical issues of child neuropsychological assessment (history taking/interviewing, test selection/testing issues, communication of test findings) and the presentation of specific medical neurological conditions.

HPSC 541 History and Systems of Psychology and Philosophy of Science (2 QH)
Historical antecedents through contemporary positions involving philosophy and clinical developments are analyzed and critiqued in the framework of current knowledge, problems and future directions.

HPSC 560 Cognition and Cognitive Assessment (4 QH)
Theoretical and practical issues of test construction and measurement are considered in-depth along with issues of development, standardization and validation of psychological tests. Theory of assessment of adult intellectual functioning and practical application of the Wechsler Scales are included.

HPSC 567 Neuropsychological Assessment (4 QH)
The course explores the use of psychological tests in the evaluation of the relationship between brain and behavior. The goal of this course is to acquaint students with modern neuropsychological approaches to normal and abnormal behavior along with methods of assessing the neurological basis of behavioral problems.

HPSC 571 Independent Study (1-3 QH)
This is an independent study course, which would involve students to typically work one-on-one with an instructor. This course would typically involve the reading of articles, meeting with the instructor to gain more knowledge in a certain area and possibly mini quizzes, etc.
HPSC 573 Health Psychology: Psychological Comorbidities of Physical Illness (4 QH)
This course is an introduction to the psychological disorders that are frequently comorbid with physical health conditions. The etiology of select physical conditions, their psychological correlates, assessment and specific interventions will be discussed.

HPSC 574 Neuropsychological Models of Cognition and Emotion (3 QH)
This course provides a survey of the current theories on the neurological basis of human behavior, normal and pathological. Evidence relevant to these models will be examined including traditional clinical lesion approach and more recent neuroimaging findings. Discussion of these models is framed in the context of selected clinical syndromes. The importance of individual differences (e.g., sex, culture) genetic factors and environmental context will be integrated with the neurological perspective in the examination of the cognition and emotion over the lifespan.

HPSC 575 Social Psychology (3 QH)
This course provides an in-depth discussion of theory and research contribution to social functioning, development and organizational issues. The utilization of social psychological principles in applied settings will be examined.

HPSC 576 Essentials of Physiological Psychology and Behavioral Neuroscience (3 QH)
This course provides an overview of how the nervous system controls behavior. It begins by examining the intrinsic properties of neurons and how these cells enable information to flow through the nervous system. Topics include organization of the nervous system, structure and function of neurons, and neural communication. It then examines relevant methods for investigating the nervous system including relevant anatomical behavioral, cellular, imaging and neurophysiological approaches in animal and human behavior. The course concludes with an overview of how neurons work together regionally and as part of the system or circuit to support higher-order phenomena such as sensory perception, motor control, emotion and cognition.

HPSC 577 Socio and Cultural Foundations of Behavior (4.5 QH)
Using a systems approach, this course will examine the impact of privilege on students’ perception of culture, diversity, and identity. Students will explore their own culture, and their reactions to and perception of persons who are different. The course specifically examines class, ableness, gender roles, ethnicity and sexual orientation, and the interaction between those statuses and clinical issues. Strong emphasis will be placed on the constructions, meaning and experiences of difference in an effort to prepare students to function as culturally responsive, ethical psychologists, plus some social foundations of behavior curriculum.

HPSC 605 Special Topics in Psychology (1-5 QH)
Current topics of particular interest in the field of psychology with emphasis on discussion of current literature and its relevance to research and/or clinical practice in psychology.

HPSC 610 Clinical Practicum Supervision (1 QH)
Students will meet twice a month for one hour with their training year peers and the Director of Clinical Training. During these meetings, students will discuss their clinical practicum experiences and learn from each other via discussion and presentations. Additional content will be covered through lectures and discussion led by the DCT. These content topics will be used to pay particular attention to helping students develop conceptualization, case formulation and treatment skills in order to enhance their clinical growth. Students will also contribute to content
topics as they present issues from their practicum site that require clarification or that present difficulty.

**HPSC 621 Psychopharmacology Essentials (2 QH)**
This class, designed for the non-prescribing mental health clinician, will review the various psychopharmacologic interventions used to treat various behavioral health conditions including mood disorders, anxiety disorders, PTSD, thought disorders, and ADHD. Students will be able describe key concepts related to underlying pharmacodynamics, pharmacokinetics, common and serious adverse drug events, typical medication combinations and typical dosages for each of the main classes of medications used to treat behavioral health conditions. Students will be able to describe the various neurotransmitter roles and mechanism(s) of actions of commonly used psychotropic medications. Students will be able to summarize the key points of various concepts such as tolerance, abuse, iatrogenic addiction and withdrawal and medication discontinuation.

**HPSC 664 Personality Assessment (4 QH)**
This course encompasses the theory and application of objective psychological tests for the assessment of personality and personality development.

**HPSC 668 Theories of Personality and Emotion (3 QH)**
Major personality theories are covered, with an emphasis on current approaches and empirical bases. In addition, this course will review different approaches to the study of emotion. The course will cover research methodology, current controversies and implications for clinical practice. Current research on the impact of personality traits and emotional responses on behavior and relationships between normal and abnormal personality traits is reviewed.

**HPSC 669 Theories of Counseling and Psychotherapy (4.5 QH)**
This course provides an introduction to the major systems of psychotherapy and counseling. The implications of psychotherapy systems for case formulation and the similarities and differences between different psychotherapy systems are reviewed. The course places special emphasis on the key assumptions of various applied theories, the role and basic methods of clinical assessment, the stages of therapy, the role of the therapeutic relationship and the goals and strategies to effect change. Credit hours on gender-sensitive psychotherapy and culture-sensitive psychotherapy are included. Research bearing on and based on these systems is considered.

**HPSC 690 Cognitive and Behavior Interventions (5 QH)**
This course will emphasize the use of empirically supported therapeutic methodologies to facilitate behavior change for a variety of clinical problems in adults. The application of different learning principles and specific techniques of therapeutic change will be covered. The student will learn to solve problems encountered in practical application of cognitive and behavioral techniques. Emphasis will be placed on methods and procedures effective in the elimination of inappropriate behaviors and the acquisition and maintenance of appropriate behaviors.

**HPSC 750 Advanced Physiological Research Seminar (1 QH)**
This introduction to human neuroanatomy involves examination of the gross brain, sections, and slides. Students will learn to identify structures and their function, especially those pertaining to the course content of HPSC 576 Essentials of Physiological Psychology and Behavioral Neuroscience.
HPSC 751 Health Psychology: Cognitive, Affective and Physiological Bases for Behavior (4 QH)
This course provides an overview of representative content areas and conceptual approaches to health psychology/behavioral medicine. It considers the concepts of stress and coping; autonomic and immune function; endocrine parameters and epidemiological approaches to outcomes in cardiovascular disease, cancer, diabetes, obesity and the addictions.

HPSC 754 Lifespan Developmental Psychology (4.5 QH)
The course is a basic developmental course covering the entire lifespan from biological, social and cognitive perspectives. Special emphasis will be placed on the unique methodological features of developmental research and the application of developmental research in the clinical setting.

HPSC 756 Ethical Issues and Professional Standards in Clinical Psychology II (3 QH)
The course examines practice guidelines including the Clinical Psychologist Licensing Act. It also examines ethical and legal guidelines for advertising, confidentiality, custody, malpractice and other forensic issues.

HPSC 757 Ethical Issues and Professional Standards in Clinical Psychology (4.5 QH)
The course is designed to introduce the doctoral student to ethical principles and issues affecting practice in clinical psychology. The course examines practice guidelines including the Clinical Psychologist Licensing Act. It also examines ethical and legal guidelines for advertising, confidentiality, custody, malpractice, and other forensic issues.

HPSC 783 Family Systems and Therapy (4.5 QH)
In this course students are introduced to the major models of family therapy. Primary theorists and techniques of each model will be considered. Students will explore a variety of family systems with an emphasis on understanding cultural, gender and sexual orientation differences as they relate to family therapy. Students will understand and complete assessment procedures with a particular emphasis on genogram construction and interpretation.

HPSC 784 Professional Seminar in Clinical Fundamentals (4 QH)
Objectives: Prepare for therapy practicum in the second year. Through practice, discover basic clinical strengths and areas of growth; learn specific systemic issues relevant to particular practicum sites; increase knowledge, awareness and skill in working with diverse populations. Understand the importance of professionalism, such as boundaries, limits of competence and limits of confidentiality. Learn the fundamentals of interviewing. Develop an understanding of formulations based on cognitive behavior therapy.

HPSC 788 Forensic Psychology (2 QH)
This course will offer a survey of the history of forensic psychology, landmark cases, relevant American law, frequently used statutes and guidelines in criminal cases (e.g., sanity, competency and diminished capacity), civil cases (e.g., competency, commitment, disability and child custody) and hybrid criminal/civil matters (e.g., sex offender commitment), ethical guidelines and professional issues.

HPSC 800 Clinical Practicum (1-12 QH)
This is a clerkship in clinical inpatient and outpatient psychiatric, psychological and medical settings. Under direct supervision of psychologists (or in selected instances psychiatrists), this typically takes place throughout the student curriculum.
HPSC 810 Clinical Practicum Supervision (1 QH)
This seminar is designed to familiarize fourth-year clinical psychology doctoral students with methods and models of clinical supervision and consultation in an ethical and multicultural context. The seminar includes a didactic component and an applied supervision training component. Each fourth-year student is assigned a first-year practicum student upon which a “vertical ladder” of supervision shall be utilized. Students will be presented with content material relevant to learning supervision and consultation. Practice of these skills will be initially exercised through meetings with assigned supervisees. Once engaged, students will supervise through the use of three simulation exercises (dates/topics to be provided). Students are required to attend the initial simulation exercise with their supervisee. Finally, opportunities for case discussions with supervisees will take place as first-year supervisees become more fully engaged in their initial clinical practicum placements. Fourth year students will meet bi-weekly with their same year peers and the Director of Clinical Training. These meetings will last 1.5 hours. In addition to learning skills of supervision and consultation, students will share their experiences via group discussions and small group practice sessions. Through the combination of didactic, practice and vicarious learning, students will develop a greater breadth of knowledge. Students will also have the opportunity to present issues for which additional clarification and/or problem-solving may assist them in their current practicum settings. Lastly, students will participate in a four-week professional development module aimed at providing information/experience to ease the transition into the world of work. Specific topics will be discussed at the initial seminar meetings.

HPSC 850 Research Practicum (1-12 QH)
This is an individual research practicum with faculty members of the department of psychology along with research experiences with clinical faculty and affiliated institutions. The duration of these experiences typically encompasses the entire year.

HPSC 890 Dissertation Research (12 QH)
This designation is utilized for students who have completed all course and research requirements but are continuing with thesis/dissertation work.

HPSC 891 Internship (12 QH)
This designation is utilized for students who have completed all course and research requirements but are continuing with thesis/dissertation work while on internship.

HPSX 503A & B same as HBMS 507A & B
HPSX 511 same as HHCM 518
HPSX 512 same as HHCM 519
HPSX 515 same as HHCM 522
HPSX 518 same as HHCM 525
HPSX 520 same as HHCM 551
HPSX 526 same as HHPE 510
HPSX 529A & B same as HIPS 515A & B
HPSX 533 same as HPCC 503
HPSX 537 same as HPOP 508
HPSX 538 same as HPOP 530
HPSX 540 same as HPOP 540
HPSX 541 same as HPOP 541
HPSX 568 same as HNUT 504
HPSX 569 same as HNUT 505
HPSX 570 same as HNUT 510
HPSX 574 same as HNUT 541
HPSX 575 same as HNUT 541
HPSX 634 same as HPCC 600
HPSX 636 same as HPCC 602
HPSX 635 same as HPCC 601
HPSX 667 same as MFPM 600

HPTH 580 Rasch Analysis (1 QH)
An overview of the use of the Rasch Analysis for the development and evaluation of assessment instruments.

HPTH 618 Orientation to Physical Therapy (4 QH)
This course will explore the health care delivery system in general as well as the history of physical therapy; professional, ethical and legal aspects of practice; the current practice of physical therapy, and the physical therapist's roles as a practitioner, leader, educator, researcher, and critical thinker in a variety of settings and in wellness and prevention. Medical terminology, prevention and wellness-related screening, and basic palpation techniques will be also introduced.

HPTH 620 Clinical Skills I (5 QH)
The emphasis of Clinical Skills I is on the management of the total patient, including the patient’s direct needs and related physical therapy responsibilities. Topics include written and verbal communication, patient safety, infection control, physical therapy evaluation, physical assessment and screening, appropriate patient referrals, patient handling skills, positioning, bed mobility, transfers, gait training, selected cardiovascular and pulmonary topics, bandaging, thermotherapy, and cryotherapy.

HPTH 622 Critical Inquiry I (3 QH)
Students are introduced to the elements of thought and the logic of critical thinking. Measurement theory and principles as applied to clinical practice and research are studied. The role of the researcher in professional practice is examined. Principles and application of scientific inquiry are emphasized.

HPTH 623 Practice Issues I (1 QH)
This course is an introduction and orientation of the clinical education process and philosophy within the entire curriculum. Requirements and expectations from clinical faculty are discussed. Professional behaviors and clinical decision-making are introduced. Evaluation of self, the clinical setting, and clinical faculty is defined. Effective professional communication skills are
practiced. Investigation, negotiating, planning and selection of Summer Quarter Module 5 clinical experience Clerkship I is initiated.

HPTH 630 Clinical Skills II (3 QH)
This course introduces basic physical therapy examination, evaluation and intervention skills. The student will begin to formulate goals and an intervention plan based on examination results. Clinical examination, evaluation and intervention principles including range of motion and muscle testing, neurologic assessment, orthopedic special tests, therapeutic exercise, manual therapy, soft tissue mobilization, documentation and posture will be studied. Specific examination, evaluation and intervention skills for the joints of the upper extremity will be presented.

HPTH 631 Clinical Skills III (3 QH)
This course continues with the examination, evaluation and intervention principles introduced in Clinical Skills II. Specific examination, evaluation, and intervention skills for the joints of the lower extremity and spine will be presented. The student will also study electromagnetic radiation, lasers, hydrotherapy, ultrasound and pathological gait. This course emphasizes comprehensive physical therapy case management including integration of previous Clinical Skills courses.

HPTH 634 Orthopedic Clinical Medicine (3 QH)
This course is a study of musculoskeletal and orthopedic conditions commonly treated by physical therapists. Course material includes etiology, pathology, clinical manifestations and medical and surgical treatment. This medical course is presented in sequence with clinical evaluation and treatment planning coursework. Case studies will be used to integrate material from these courses.

HPTH 635 Kinesiology/Motor Control I (3 QH)
Principles of tissue mechanics, muscle mechanics and principles and theories of motor control and motor learning are presented, along with methodology for static and dynamic analysis of movement. This information is applied to the prevention and rehabilitation of neuromusculoskeletal disorders.

HPTH 636 Kinesiology/Motor Control II (4 QH)
Principles and concepts of kinesiology are applied to the study of normal human movement, osteokinematic and arthrokinematic joint motion, surface anatomy and muscular control of limb segment motion. These concepts are integrated with principles and theories of motor development, motor learning and motor control within the context of simple and complex motion analysis for joints of the extremities and spine.

HPTH 640 Clinical Skills IV (5 QH)
This is the first of a two-course series focusing on physical therapy evaluation and evidence-based intervention for adults with movement dysfunction due to common neurologic disorders. Course content includes the examination and evaluation of impairments of body structures and functions, movement analysis and strategies, mobility, control of posture and balance, and participation. Basic concepts and clinical application of electrotherapy such as neuromuscular electrical stimulation and biofeedback are introduced and applied to movement dysfunction.
HPTH 642 Critical Inquiry II (3 QH)
Descriptive and inferential statistics with relevance to physical therapy and clinical research will be discussed. Instruction includes the use of the computer for statistical analysis. The students will have the opportunity to use statistics for a small pilot study.

HPTH 643 Practice Issues II (2 QH)
This course continues the investigation of practice management and clinical education concepts. Students will reflect, self-assess, and discuss objectives and outcomes for the clinical environment through credentialing, and explore clinical performance assessment methods. Additional professional practice topics include payment and documentation issues, discharge planning, direction and supervision of personnel, and advocacy. Students will complete the first of three Comprehensive Examinations.

HPTH 644 Neurological Clinical Medicine and Pharmacology (3 QH)
This course is a problem-based introduction to the medical and pharmacological treatment of neurological conditions commonly treated by physical therapists. This course is coordinated with Neuroscience and Clinical Skills to enable students to examine the structural and functional aspects of the neurological system in tandem with discussion of neurological disorders such as multiple sclerosis, Parkinson's syndrome and cerebral vascular accident. Topics include etiology, pathology, clinical manifestations, and prognosis, as well as medical, surgical and pharmacological treatments with application to physical therapy.

HPTH 645 Clinical Physiology (6 QH)
This course will examine theory and application of physiological concepts as related to exercise, physical therapy and rehabilitation. Areas of study include physiology of the connective tissue, integumentary, nervous system, bioenergetics, energy substrate metabolism, endocrinology, cardiovascular physiology, respiratory physiology, chronic disease and exercise, and principles of exercise training. Emphasis will be on human performance and exercise physiology through the lifespan in health, common associated pathologies and lifestyle-related disease processes.

HPTH 646 Fundamentals of Physiology (4 QH)
The fundamentals of human physiology relating to basic cellular function, neurophysiology, the cardiovascular system, respiration, the gastrointestinal system, the renal system and embryology (Physiological concepts and mechanisms will be organized according to five themes: homeostasis and control systems; biological energy use; structure/function relationships; communication and pathophysiology.

HPTH 716 Clerkship I (10 QH)
This course is the first full-time clinical education experience. The student will engage for a minimum of 35 hours per week at an approved clinical education site for a total of 10 weeks. The student will apply and attain professional knowledge, skills, and behaviors in a structured clinical education environment under the supervision of one or more clinical instructors. The experience may take place within a variety of environments, provide a variety of learning opportunities, and include care of patients/clients across the lifespan and practice settings. While the emphasis is on patient-care skills, experiences may also include inter-professional experiences and non-patient care duties such as research, teaching, supervision, and administration. Formal student clinical performance assessment will occur midway through and at the end of the experience.
HPTH 718 Clerkship II (14 QH)
This intermediate full-time clinical education experience is the second of three Clerkship courses. The student will engage for a minimum of 35 hours per week at an approved clinical education site for a total of 12 weeks. The student will apply and attain professional knowledge, skills, and behaviors in a structured clinical education environment under the supervision of one or more clinical instructors. The experience may take place within a variety of environments, provide a variety of learning opportunities, and include care of patients/clients across the lifespan and practice settings. While the emphasis is on patient-care skills, experiences may also include inter-professional experiences and non-patient care duties such as research, teaching, supervision, and administration. Formal student clinical performance assessment will occur midway through and at the end of the experience. Students will also complete a case report assignment as a component of this course.

HPTH 720 Clinical Skills V (4 QH)
In this course, students integrate and apply various evaluation and treatment approaches for the patient who exhibits neuromusculoskeletal dysfunction. Students will evaluate evidence for evaluation and intervention approaches for this population of patients. Advanced exercise and manual therapy evaluation and intervention techniques are presented. Students also study electotherapeutic principles and application for pain and iontophoresis.

HPTH 721 Clinical Skills VI (3 QH)
This is the second of a two-course series focusing on physical therapy management for adults with movement dysfunction due to common neurologic disorders. Emphasis will be placed on interpretation of evaluation findings to differentially diagnose and determine prognosis, and on design and implementation of complex, evidence-based treatment plans.

HPTH 722 Critical Inquiry III (1 QH)
This course prepares students for dissemination and use of research. Students will have the opportunity to present their group research project in both written and platform form, and to critically evaluate case report research. In addition, students will learn to present research in a scientific poster. Students will use concepts of evidence-based practice to evaluate and use empirical evidence in clinical decision-making.

HPTH 724 Advanced Clinical Medicine and Pharmacology (5 QH)
Clinical medicine topics are integrated with neuromusculoskeletal treatment. The student learns to differentiate between those conditions appropriate for physical therapy intervention and those that require referral to other medical specialists. Pharmacological interventions begun in Quarter Module 4 are continued.

HPTH 725 Advanced Regional Anatomy (2 QH)
Students will examine in-depth the anatomy of various joint regions of the human body. Anatomical views of pathology via plain film radiographs, MRI and CT scan will be analyzed. Discussions and integration of previous coursework with skeletal models, dissections and/or prosections will be used to improve understanding of normal and abnormal function.

HPTH 740 Clinical Skills VII (3 QH)
The student will further synthesize and analyze the rehabilitation of clients with complex disorders integrating divergent practice areas into clinical decision-making processes. Topics include geriatrics, pelvic health, lymphedema, oncology, abuse, preventive behaviors and aquatic therapy.
HPTH 741 Pediatric Physical Therapy (4 QH)
This course builds on the knowledge of typical and atypical development from birth through adolescence received in other courses to explore the effects of atypical development on movement acquisition. Physical therapy examination, evaluation and intervention planning and implementation are discussed in reference to infants, children and adolescents across different settings.

HPTH 742 Physical Therapy in the Critical Care Sector (2 QH)
This course presents a focus on patients requiring acute and critical care. It covers examination, evaluation, and intervention strategies, and outcomes for patients across the lifespan and in different critical care environments. Topics covered include: infection control, clinical emergencies, interprofessional team, patient care in the intensive care unit, laboratory values and advanced line/equipment management, transplantation, burn care, and grieving and loss. This course presents a focus on patients with medically complex diagnoses requiring acute and critical care.

HPTH 743 Practice Issues III (1 QH)
This course analyzes clinical experiences from Clerkship I. Clinical problems and solutions will be discussed. Ethical situations and dilemmas are addressed. Students will practice effective verbal and non-verbal communication skills. Investigation, design, and selection of Winter Quarter Module 7 clinical experience Clerkship II are completed.

HPTH 744 Prosthetics/Orthotics (3 QH)
The principles of prosthetic and orthotic client management will be discussed with emphasis on examination, evaluation, intervention and interprofessional collaboration and referral.

HPTH 747 Cardiovascular and Pulmonary Physical Therapy I (3 QH)
This is the first of a two-course series focusing on Physical Therapy management of cardiovascular and pulmonary (CVP) health and dysfunction. This course primarily covers physical therapy examination, evaluation, diagnosis, prognosis, and medical management for individuals with CVP disorders or dysfunction in various care environments throughout the continuum of care. This course will enhance students’ understanding of how impairments of the CVP system can impact movement, as well as how impairments of other systems can impact the CVP system.

HPTH 748 Cardiovascular and Pulmonary Physical Therapy II (2QH)
This is the second of a two-course series focusing on Physical Therapy management of cardiovascular and pulmonary (CVP) health and dysfunction. This course continues with instruction in examination and evaluation, and introduces interventions for individuals with CVP dysfunction. Interventions taught in this course include mobilization, breathing control, ventilatory strategies, airway clearance, and exercise testing and prescription focused on strength and endurance components.

HPTH 749 Critical Inquiry IV (1 QH)
This course completes the Critical Inquiry sequence. Advanced measurement principles and topics in research and statistics will be introduced. Students will have the opportunity to present their group research as a poster presentation, participate in the peer review process, and finalize a case report manuscript based on reviewer feedback.
HPTH 823 Practice Issues IV (3 QH)
In this, the fourth course in the Practice Issues series, students will explore advanced practice management and professional development concepts. Students will again conduct reflection and self-assessment activities related to clinical education through credentialing. Advanced topics include professional state and federal legislative priorities, business and management, billing and coding, and legal issues. Professional practice topics include sports specialization, dry needling, and population health. Students will examine professional development principles related to residencies and fellowships, preparations for the NPTE, resume writing, interviewing skills, and non-clinical roles for physical therapists. Students will complete the second of three Comprehensive Examinations.

HPTH 835 Clerkship III (12 QH)
This terminal full-time clinical education experience occurs after the student has completed the didactic curriculum of the physical therapist professional education program. The student will engage for a minimum of 35 hours per week at an approved clinical education site for a total of 12 weeks. Students may return to the academic program for didactic instruction that does not require additional clinical education experiences. The student will apply and attain professional knowledge, skills, and behaviors in a structured clinical education environment under the supervision of one or more clinical instructors. The experience may take place within a variety of environments, provide a variety of learning opportunities, and include care of patients/clients across the lifespan and practice settings. While the emphasis is on patient-care skills, experiences may also include inter-professional experiences and non-patient care duties such as research, teaching, supervision, and administration. This course is designed so that students gain substantial, relevant clinical experience and skills, engage in contemporary practice, and demonstrate competence before beginning independent practice. Formal student clinical performance assessment will occur midway through and at the end of the experience. The expected outcome is entry-level performance at the end of the experience.

HPTH 843 Practice Issues V (1 QH)
This culminating on-campus seminar includes guest presentations, student presentations, and faculty panels. It occurs at the end of Spring Quarter, Year 3. Students will present their experiences and activities from HPTH 848 Professional Practicum. In addition, they will correlate and assemble all documents required for the faculty to approve their completion of degree requirements, and meet with representatives from the financial aid office to discuss necessary procedures and topics prior to graduation. Students will reflect upon past experiences in the program, and moving forward as a professional.

HPTH 848 Professional Practicum (12 QH)
The Professional Practicum is a 12-credit, independent study that the student completes in the final year of the Doctor of Physical Therapy program. The purpose of the practicum is for the student to pursue an individual interest within the areas of administration, critical inquiry, education or healthcare policy. Although the focus is in one area, the student must integrate objectives from the other areas. The student, with input from their advisor, designs the project, develops the objectives to guide the experience and is responsible for timely completion of the practicum project. At the end of the 12th quarter, each student will be responsible for an oral and written summary of their project.

HPTX 529A & B same as HIPS 515A & B
HPTX 532 same as HPAS 551
HPTX 563 same as MCBA 501
HPTX 579 same as PBBS 504

MANE 810 Anesthesiology (1.5-12 QH)
The purpose of this course is to provide students with experience in airway management, procedural sedation and analgesia, venous access, hemodynamic monitoring and evidence-based care of the operative/peri-operative patient. Additional individualized instruction may occur in anesthesia subspecialties.

MANE 811 Anesthesiology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MANE 824 Pain Management (1.5-12 QH)
This course provides students with experience in the diagnosis and management of acute and chronic pain. Students will experience the interdisciplinary approach to pain management and become familiar with pharmacological, non-pharmacological, and interventional therapies used in the discipline of pain medicine.

MANE 825 Pain Management Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MANE 880 Anesthesiology Sub-Specialty (1.5-12 QH)
The purpose of this course is to provide students with experience in a subspecialty of anesthesia, such as cardiovascular, neurosurgical, obstetrical, or pediatric anesthesia.

MANE 881 Anesthesiology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MANE 888 Anesthesiology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of anesthesiology in a virtual or other non-clinical setting.

MANE 889 Anesthesiology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MANE 898 Anesthesiology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of anesthesiology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.
MCBA 500A & B Clinical Anatomy (8.5 QH)
Clinical Anatomy is a comprehensive series of lectures on the gross structure and function of the human body, including clinical correlation lectures by Medical Professionals. The lectures are complemented by complete regional dissections of human cadavers in the laboratory.

MCBA 501 Clinical Anatomy (10 QH)
Both gross anatomy and developmental anatomy are studied in this course. Laboratory time is devoted exclusively to the regional dissection of human cadavers. Supplementary offerings within the course include films, prosected cadavers and bone sets for individual study.

MCBA 630 Advanced Regional Anatomy Dissection (1 QH)
This course is designed to enable M2 students interested in performing cadaver dissection to perform a regional dissection in areas of their choosing. Students will be required to complete up to 20 hours in the gross anatomy lab dissecting one or two full anatomic regions as indicated by the course schedule. Completion of regional dissections will be assessed by either the course director or a designated lab instructor. Laboratory time will be devoted exclusively to the regional dissection of human cadavers.

MCBA 802 Dissection-Based Anatomy (3-6 QH)
This course is designed to enable students pursuing surgical careers to review anatomy in a regional area of their choice. Students must submit a proposal to their course director and a sponsoring faculty member, and keep a detailed dissection log. A project should be completed within a quarter but could be extended by petition.

MCCR 606 Clinical Skills (2 QH)
Students will apply basic science and clinical knowledge in preparation for their clerkship rotations. Learning activities will include reading EKGs and radiological imaging, virtual, mannequin and standardized patient experiences, writing progress notes, practicing clinical procedures such as NG intubation, oxygen delivery, sterile scrubbing and gowning, foley catheterization; large group discussions and a small group evidence-based medicine presentation.

MCCR 898 Transition to Internship (1 QH)
This course uses high-fidelity simulation, interactive small group discussion, role play, and standardized patients to teach and assess many of the skills necessary to transition from M4 student to first-year resident.

MCLN 700 M3 Career Exploration (1.5-6 QH)
This course is designed to supplement the required learning activities of the curriculum by allowing students to deepen their understanding of medical topics and explore career pathways in medicine.

MCLN 701 M3 Career Exploration Extramural (1.5-6 QH)
This course is designed to supplement the required learning activities of the curriculum by allowing students to deepen their understanding of medical topics and explore career pathways in medicine. Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MCLN 800 M4 Elective (Clinical) (1.5-12 QH)
M4 elective opportunities are designed to supplement the required learning activities of the curriculum by allowing students to deepen their understanding of medical specialties, function at a more advanced level in preparation for residency training, care for a diverse patient population, and learn how health care is delivered in a variety of settings. To earn credit, students must obtain administrative approval from the host institution and the Office of Medical Education.

MCLN 801 M4 Extramural Elective (Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 802 Internal Medicine/Pediatrics (1.5-12 QH)
This course provides students interested in dual residency training in medicine and pediatrics the opportunity to learn more about this specialty. Students will participate in the healthcare of a broad age range of patients, including newborns, infants, children, adolescents, adults and the elderly.

MCLN 803 Internal Medicine/Pediatrics Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 804 Sports Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of sports medicine. Students will learn to recognize and treat commonly encountered problems in musculoskeletal and exercise-related diseases and to become familiar with diagnostic techniques used to diagnose musculoskeletal disorders including sprains, fractures, dislocations, and overuse injuries. Students will also learn when it is appropriate to initiate a referral to a sports medicine specialist.

MCLN 805 Sports Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 808 Geriatric Medicine (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in the geriatric population. Students will gain familiarity with the approach to evaluation and management of geriatric related disorders. Students will also learn when it is appropriate to initiate a referral to a geriatrician.

MCLN 809 Geriatric Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 810 Simulation-Based Medical Education (1.5-12 QH)
This course provides students with exposure to the principles of simulation-based medical education. Students may participate in facilitation of simulation labs and/or development of simulation scenarios.
MCLN 811 Simulation-Based Medical Education Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 812 Surgical Critical Care (SICU) (1.5-12 QH)
This course provides students with the opportunity to develop the knowledge and skills necessary to provide critical care in the perioperative setting. Students will gain familiarity with the diagnosis and management of problems such as respiratory failure, cardiogenic shock, surgical bleeding, coagulopathy, and sepsis.

MCLN 813 Surgical Critical Care (SICU) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 814 Emergency Medicine/Internal Medicine (1.5-12 QH)
This course provides students interested in dual residency training in emergency medicine and internal medicine the opportunity to learn more about this specialty.

MCLN 815 Emergency Medicine/Internal Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 820 Women’s Health (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of women’s health.

MCLN 821 Women’s Health Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 822 Allergy/Immunology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in allergy and immunology. Students will gain familiarity with the diagnostic techniques used in the field and learn when it is appropriate to initiate a referral to an allergist/immunologist.

MCLN 823 Allergy/Immunology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 824 Integrative Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of integrative medicine.

MCLN 825 Integrative Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MCLN 830 Emergency Psychiatry (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of emergency psychiatry.

MCLN 831 Emergency Psychiatry Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 832 Emergency Child Psychiatry (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of emergency child psychiatry.

MCLN 833 Emergency Child Psychiatry Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 836 Family Planning (1.5-12 QH)
The purpose of this course is to provide students with an understanding of the contraceptive options available to women, and to gain experience counseling patients about these options.

MCLN 837 Family Planning Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 840 Ambulatory Medicine (1.5-12 QH)
In this course, students will learn to diagnose and care for acute and chronic medical problems in the ambulatory setting.

MCLN 841 Ambulatory Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 842 Traumatic Brain Injury (1.5-12 QH)
This course is an introduction to the care of patients with traumatic brain injury.

MCLN 843 Traumatic Brain Injury Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 846 LGBTQ+ Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of LGBTQ+ medicine.

MCLN 847 LGBTQ+ Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MCLN 850 Epidemiology (1.5-12 QH)
This course is designed to provide students with practical, applicable interprofessional learning experience in a dynamic environment, such as a local health department, for application in community-based outbreaks and other events of epidemiological significance. The skills and techniques addressed include, but are not limited to, educating the public on diseases and other threats of public health importance, contact tracing of affected persons, effective communication with healthcare providers, and implementation of preventative disease control measures. Students will observe how infectious disease specialists approach patients having suspected or confirmed infections and how clinical and public health professionals collaborate to address infectious and non-infectious threats.

MCLN 851 Epidemiology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 856 Palliative Care (1.5-12 QH)
In this course, students will focus on the care of patients with serious illness, as well as progressive and potentially incurable disease. Students will learn how to manage common symptoms including pain, dyspnea, and nausea; and develop effective communication skills, including advanced care planning and complex decision-making. Students will learn to distinguish the systems of care for patients with serious illness and identify ethical considerations. The importance of interdisciplinary teamwork to address the patients' physical, psychosocial, and spiritual needs will be emphasized. This rotation may take place in a variety of clinical settings including inpatient, outpatient and home care settings and may include online education.

MCLN 857 Palliative Care Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 860 Fertility/Reproductive Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of fertility and/or reproductive medicine.

MCLN 861 Fertility/Reproductive Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 862 Genetics (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of clinical genetics, with an emphasis on prenatal diagnosis, genetic counseling, dysmorphology, and heritable metabolic disease evaluations.

MCLN 863 Genetics Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MCLN 864 Toxicology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of clinical toxicology.

MCLN 865 Toxicology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 872 Breast Health (1.5-12 QH)
This course provides students with experience in the multidisciplinary management of patients with benign, high risk, and malignant diseases of the breast.

MCLN 873 Breast Health Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 876 Reproductive Endocrinology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of reproductive endocrinology.

MCLN 877 Reproductive Endocrinology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 882 Occupational Medicine (1.5-12 QH)
This course will familiarize students with the specialty of occupational medicine. Students will gain experience in occupational injury and illness prevention, health management for employee populations, and worksite wellness.

MCLN 883 Occupational Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 884 Culinary Medicine (1.5-12 QH)
In this course, students will learn how to teach patients to incorporate healthy eating for the prevention and treatment of disease by altering their diets, meal preparation and food choices.

MCLN 884 Culinary Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 888 Neuropsychiatry (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of neuropsychiatry.

MCLN 889 Neuropsychiatry Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MCLN 894 Burn Unit (1.5-12 QH)
This course provides students with a comprehensive experience in the management of burns and wound care.

MCLN 895 Burn Unit Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCLN 896 Wilderness Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of wilderness medicine.

MCLN 897 Wilderness Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MCMP 610 Molecular and Biochemical Bases of Neuropsychiatric Disorders (1 QH)
This course takes a multidisciplinary approach to present various neurochemical correlates of normal and abnormal behavior. Current biochemical theories of different neuropsychiatric disorders are presented in some detail; the rationale underlying use of different classes for the treatment is presented. Discussion of addiction-causing drugs and relationship to their suggested mechanism of action is presented.

MCMP 613 Principles of Drug Action and Therapeutics (1 QH)
The purpose of this course is to present a comprehensive and coherent explanation of the science of pharmacology in terms of its basic concepts and principles. It will cover various ethics, moral and legal aspects of drug development. It will follow the path of various classes of drugs from their administration to their absorption, distribution, biotransformation and elimination. Dose-response relationship and host factors influencing drug reactions and interactions will be discussed.

MCMP 615 Regulation of Gene Expression by Drugs of Abuse (1 QH)
This course involves research on drugs of abuse, such as cocaine, which causes altered expression of genes in neurons of brain systems that are involved in the generation of motivated behavior. The research focuses on the effects of drugs of abuse on gene regulation in the basal ganglia and related forebrain systems.

MCMS 500A, B & C Clinical Foundations of Medicine (6 QH)
Clinical Foundations of Medicine is a course designed to develop standardized clinical performance skills and an initial approach to the patient, providing patient care that is safe, effective and efficient through accurate initial data collection and screening, application of appropriate stabilization protocols, transport and turnover of the patient at the receiving hospital site.

MCMS 505A & B Infection-Immunology-Hematology (9.5 QH)
This course focuses on the development and function of the hematological and immune systems, and the basic properties of microbes. In addition, the clinical presentation, diagnosis, treatment,
and prevention of infectious disease and disorders of the immune and hematologic systems will be described with an emphasis on pathophysiological mechanisms.

**MCMS 510 Scientific Foundations of Medicine (10.5 QH)**
This course presents the scientific foundations of evidence-based medicine. The bases of the biochemical, molecular and cell biological, histological, genetic, embryological, pathological and physiological underpinnings of human health and disease are provided. Emphasis is placed on the regulation and integration of processes by comparing the normal and pathological states associated with function and dysfunction of humans from the molecule to the whole patient.

**MCMS 515 Gastroenterology (8 QH)**
The focus of this course is the recognition and understanding of health and disease in gastroenterology. Clinical data, along with an understanding of normal structure and function, pathophysiology and epidemiology, will be used to construct differential diagnoses for common clinical presentations. Diagnostic testing and treatment will be covered. Health maintenance, disease prevention and interprofessional collaboration will be emphasized.

**MCMS 520 Skin (3.5 QH)**
This course focuses on the basic science and clinical aspects of skin using a combination of large and small group learning sessions, online modules, laboratories, and case studies.

**MCMS 525 Cardiovascular-Pulmonary-Renal (15 QH)**
This course provides the student with an overview of the basic science and clinical aspects of the normal and pathophysiological functions of the cardiovascular, pulmonary and renal systems that will enable the student to recognize, understand, diagnose and treat the common clinical cardiovascular, pulmonary and renal system conditions/diseases and to promote preventive interventions relevant to those common conditions.

**MCMS 600 Musculoskeletal (4 QH)**
This course focuses on the basic science and clinical aspects of the musculoskeletal system using a combination of lectures, large and small group learning sessions, online modules, laboratories, and case studies.

**MCMS 605 Neurobehavioral Health (19.5 QH)**
Neurobehavioral Health covers the structure and function of the nervous system from biochemical to behavioral levels and the relationship of this biology to major neurological, psychiatric and special sense disorders including their presentations, differential diagnoses, and modes of treatment.

**MCMS 610 Endocrine-Reproductive (13 QH)**
This course provides the student with an overview of the basic science, the diagnosis and the management of common endocrine and reproductive diseases. Clinical cases will illustrate common endocrine and reproductive disorders.

**MCMS 615 Multisystem (6.5 QH)**
The multisystem course provides an overview of important multisystem pathologies, their prevention and management. This is achieved through integration of multiple threads of previously taught organ-based clinical and basic science concepts.

**MCSC 602 Integration of Nutrition into Healthcare Practice (1 QH)**
This course provides the healthcare professional with an up-to-date overview of evidence-based human nutrition knowledge focusing on benefits and determinants of healthy dietary practices.
and their individualization to meet specific patient needs. A practical approach for incorporation into a busy medical practice will be explored using communication skills and motivational techniques to guide patients towards healthy practices. Content will include assessment of diets and how nutritional needs can be met by consumption of specific foods as integrated into the overall diet. The influence of factors such as culture, literacy level, religion, skills and socioeconomic background as they impact diet will be explored.

**MCSC 603 Reproductive Medicine – RFU Health System (3 QH)**

This elective course is designed for the second year student who wants to study clinical and laboratory research in reproductive medicine. The student will perform duties in the reproductive medicine clinic and the clinical immunology laboratory. Students will be asked to learn basic elements and concepts of pregnancy and immunology, immunological treatment for recurrent pregnancy losses and infertility and basic infertility work-ups. Students will be involved in an ongoing study or may participate in setting up a clinical or laboratory study. In the latter case, the student will be actively involved in writing the study proposal and conducting the actual study. At the end of their elective, an abstract can be generated. If a manuscript is generated, the student will be involved in the actual manuscript preparation.

**MCSC 801 Patient Safety (3 QH)**

In this online course, students will review patient safety concepts, apply quality improvement methods and develop leadership skills to address patient safety.

**MCSC 804 Introduction to Nutrition in Critical Care (1 QH)**

An overview of malnutrition as it relates to critically ill adult patients including recognizing the signs, symptoms, and risks of malnutrition as well as foregone opportunities for the healthcare organization. Students will also gain familiarity with performing nutrition-focused physical assessments and determining when it might be appropriate to consult with a registered dietitian. This course will also introduce the critical role of specialized nutritional support (enteral and parenteral nutrition) in improving healthcare outcomes.

**MCSC 805 Nutrition Throughout the Life Cycle (3 QH)**

Employing an inter-health professional orientation this course will introduce students to the guidelines for healthy eating throughout the human life cycle using best practice approaches. Multiple influences on the diet of individuals will be addressed including social, cultural, environmental, and medical factors. This course is designed to keep students engaged and require them to think critically and apply their knowledge to problem solve real life situations.

**MCSC 806 Nutrition for Chronic Disease Management and Prevention (6 QH)**

Case-based instruction will be employed to inform students about nutritional risk factors and treatment of chronic diseases that are most commonly encountered in primary care practice. This course will explore cutting edge research that validates the role of food and therapeutic diets for chronic disease management and prevention.

**MCSC 807 Cultural Awareness in Psychiatry (3 QH)**

At the conclusion of this rotation, CMS Medical Students will: (1) Describe how different mental health disparities and cultural stigma contribute to patient outcomes. (2) Identify social determinant indicators among diverse populations. (3) Describe how stress and discrimination contribute to risk of adverse outcomes in individuals. (4) Recall basic principles in cultural competence. (5) Demonstrate awareness about recognition and development of healthcare disparities. (6) Discuss how differing values, cultures, and belief related to mental health, illness,
symptoms, diseases and treatment effect the delivery of healthcare. (7) Identify and provide solutions for disparities. (8) Identify and provide solutions for meeting the healthcare needs of medically underserved populations. (9) Identify demographic influences on health care accessibility, quality and effectiveness. (10) Identify (continually) one's own strengths and deficiencies in knowledge, skills and attitudes including reflecting on one's own values, culture and beliefs to identify learning activities that address any identified gaps and demonstrate respect and compassion when interacting with others.

MCSC 808 Exploring Physician Leadership (3 QH)
This is a virtual course intended for M4 students to explore leadership roles for physicians and how they can begin to develop leadership skills to help them throughout their careers. The students will work individually and in groups to practice leadership and group dynamic skills.

MCSC 809 Clinical Skills Course Facilitator (1.5-3 QH)
Clinical instruction of M2 students, facilitation of small groups and review of clinical experiences with individual students occur in this elective. M4 students review M2 performance in the OSCE experience, assist in writing SOAP notes, writing orders, presenting patients, suturing, and reading X-rays and EKGs.

MCSC 810 COVID-19 (6 QH)
This course provides a comprehensive overview of the COVID-19 pandemic, from foundational science of the SARS-CoV-2 virus and immune response to clinical presentation and case management. Topics will include basic and clinical principles of virology, epidemiology, testing, diagnosis, and management of COVID-19. Additional topics will cover population health, public health, team-based care, spirituality, ethical decision-making, communication, leadership, consideration of special and vulnerable populations, and personal and professional well-being during a pandemic. Course materials will be delivered online utilizing a combination of videos and reading material, small group activities, discussion platforms, evidence-based research topics, case studies, panel discussions with content experts, web-based simulation, and writing/reflection assignments.

MCSC 812 The Business of Medicine (3 QH)
This elective will review the history of how healthcare is funded, address the pros and cons of a variety of payment models, understand the basics of health insurance, describe practice options for physicians, practice documentation of clinical encounters and reimbursement, and forecast the future of healthcare and its costs.

MCUR 502A, B & C Essentials of Clinical Reasoning I (7.5 QH)
ECR is an interprofessional course that serves as the entry point to the student’s clinical experience. Within the context of this course, students will be expected to develop proficiency in history taking, communication, and clinical exam skills. Developing the language and understanding the format of effective and professional medical communication will be emphasized while also learning the art of history taking.

MCUR 602D, E & F Essentials of Clinical Reasoning II (5.5 QH)
ECR is an interprofessional course that serves as the entry point to the student’s clinical experience. Within the context of this course, students will be expected to develop proficiency in history taking, communication, and clinical exam skills. Developing the language and
understanding the format of effective and professional medical communication will be emphasized while also learning the art of history taking.

**MCUR 605 Academic Peer Tutoring and Teaching (1-3 QH)**
This elective provides M2 students with the opportunity to provide academic assistance to M1 students. The tutor gains a better conceptual understanding of the material as they explain it to others and learns about methods and principles of education that enhance learning. The peer tutor’s primary role will be to engage the student in active inquiry about the subject matter being reviewed.

**MCUR 608 M2 Special Topics in Medicine (1-2 QH)**
The M2 Special Topics in Medicine elective is an independent study that permits M2 students to pursue, under the supervision of a CMS faculty member, additional learning in a specific area of interest. Arrangements for this elective are made between the student and faculty member.

**MCUR 610 Cultural Diversity and the Management of Healthcare Services (3 QH)**
This elective introduces the importance of providing culturally appropriate healthcare services for the diverse ethnic populations encountered in the United States. The significance of family traditions, cultural heritage, health and healing traditions on the patient’s interactions with the healthcare delivery system and providers will be explored. Students will develop interventions that managers of healthcare facilities and providers can use to diminish the conflict patients and staff may experience when traditions related to the patient’s cultural heritage are at odds with the norms in the American healthcare delivery system.

**MCUR 618 Summer Research Credit (2 QH)**
The student identifies the research opportunity that may be conducted on-site (CMS/RFU) or off-site. A research proposal is written describing the project with the help of the principal investigator/mentor. The proposal is approved by the course director. The student will sign the appropriate paperwork stating compliance with all research oversight regulations, i.e., IRB, use of radiochemicals, animals, etc. The student spends at least eight weeks in the summer on the project. No stipend is allowed since academic credit is being obtained. The student writes a 1-2 page summary of research efforts for the course director. The student then presents a poster in the CMS summer research poster session.

**MCUR 619 Epidemiology Course Facilitator (1 QH)**
During the Clinical Epidemiology course, small groups work together to develop and present a PICO (Population, Intervention, Comparison, Outcome) research question. A course facilitator will be responsible for approving the group’s PICO question. Each student in the group will conduct a literature search to find one peer-reviewed research article that addresses the group’s topic. Students will critique an article using a specific format provided for them on the D2L course site (Randomized Control Trial, Systematic Review, Cohort or Case-Control Study) and submit their report to the facilitator for review and formative feedback. The facilitator will evaluate the group’s PowerPoint presentation according to a standardized rubric.

**MCUR 801 Conversational Spanish (3 QH)**
The Conversational Spanish elective includes curricula provided by Canopy Learn Medical Spanish, a National Institutes of Health-sponsored online medical language course that teaches specialized medical concepts and terminology across a wide spectrum of commonly-encountered clinical scenarios to enable providers to establish a rapport with their Spanish-speaking patients. The online module education includes embedded lessons, videos, practice-based applications,
and assessment. Canopy Learn Medical Spanish course is based on curricula from the American Association of Medical Colleges. This elective also requires student examination of scholarly published literature on the role of culture in medical care. This appraisal, posted and virtually discussed via the Brightspace Discussion Board forum, will summarize how cultural and social factors influence the practitioner-patient communication with Latinx peoples and immigrants to the United States. A final component of the elective requires students to reflect on their own values, culture, and beliefs in response to serving a diverse (Latinx) patient population. This reflection will be posted and virtually discussed via the Brightspace Discussion Board forum with appropriate peer and faculty dialogue.

MCUR 804 Stories of Health Disparities (3 QH)
This online course will provide students with the opportunity to read/view, discuss, and reflect upon key literature and videos featuring health equity. Experiential activities relating to health equity will be incorporated.

MCUR 805 Academic Peer Tutoring and Teaching (1.5-6 QH)
This elective provides M4 students with the opportunity to provide academic assistance to M1, M2, and M3 students. The tutor gains a better conceptual understanding of the material as they explain it to others and learns about methods and principles of education that enhance learning. The peer tutor’s primary role will be to engage the student in active inquiry about the subject matter being reviewed. The first session will involve training and discussion about the appropriate facilitation skills, how to effectively communicate the material, when to stop and listen, and how to enhance learning. After the training session, students will either be assigned to work one-on-one or in small-group review sessions held at predetermined times for specific course material. Additional sessions will involve discussion and preparation of tutoring material and how to maximize its usefulness. Specific skills to be acquired include learning how to ask higher-order questions, teaching group learning skills and practicing helping behaviors.

MCUR 809 Advanced Conversational Spanish (3 QH)
The Advanced Conversational Spanish elective includes curricula provided by Canopy Learn Medical Spanish, a National Institutes of Health-sponsored online medical language course, that teaches specialized medical concepts and terminology across a wide spectrum of commonly-encountered clinical scenarios to enable providers to establish a rapport with their Spanish-speaking patients. The online module education includes embedded lessons, videos, practice-based applications, and assessment. Canopy Learn Medical Spanish course is based on curricula from the American Association of Medical Colleges. This elective also requires student examination of scholarly published literature on disparities in healthcare by race, ethnicity, and/or language. This appraisal will be posted and virtually discussed via the Brightspace Discussion Board forum. A final component of the elective requires students to reflect on potential strategies to mitigate existing cultural barriers for the diverse patient population. This reflection will be posted and virtually discussed via the Brightspace Discussion Board forum with appropriate peer and faculty dialogue.

MCUR 812 Clinical Phase I Course Facilitator (1.5-12 QH)
The primary focus of this elective will be facilitating ECR 1 and 2. This provides an opportunity for the fourth-year student to improve upon their history, physical examination and clinical reasoning skills by teaching and mentoring Year 1 and Year 2 medical and podiatry students. Senior students will receive training to teach in small-group settings, learn appropriate evaluation
methods, contribute to curriculum development and learn to write exam questions. This elective will foster peer-to-peer communication and learning and prepare students for their teaching role as residents and faculty. Additional assignments will include facilitating weekly sessions with the schema case groups, discussing interactive medical cases, and peer-teaching/mentoring duties spanning the Phase 1 curriculum.

**MCUR 817 Medical Regulation, Ethics & Professionalism-Illinois Department of Financial and Professional Regulation (IDFPR) (3-6 QH)**
The goal of this elective is to further the student’s knowledge regarding medical regulation especially as it relates to the standards of ethics and professionalism to which they will be held during their medical careers. At the completion of this elective, students will be able to describe the medical licensing system in Illinois and how it compares to that in other states; describe the medical regulatory/disciplinary system in Illinois and how it compares to that in other states; discuss how this system accomplishes its dual responsibilities of protecting the public while remaining fair to the licensee (physician); identify the roles “standard of care” and “professionalism” play in the medical disciplinary process; explain how this rotation will influence the participant’s future practice of medicine.

**MCUR 820 M4 Professional Development (1.5 QH)**
The M4 Professional Development elective is designed to provide students an opportunity to prepare for their residency application by updating their curriculum vitae, developing a plan to evaluate residency programs, preparing their noteworthy characteristics, writing a personal statement and developing interview skills. At the conclusion of this course, the student will have scheduled a review of their application and a practice interview with their Faculty Specialty Advisor.

**MCUR 851 Special Topics in Medicine (Non-Clinical) (1.5-6 QH)**
The M4 Special Topics in Medicine elective is an independent study that permits M4 students to pursue, under the supervision of a CMS faculty member, additional learning in a specific area of interest. Arrangements for these electives are made between the student and faculty member.

**MCUR 852 Special Topics in Medicine (Clinical) (1.5-6 QH)**
The M4 Special Topics in Medicine (clinical) elective is an independent study that permits M4 students to pursue, under the supervision of a CMS faculty member, additional learning in a specific area of interest. Arrangements for these electives are made between the student and faculty member.

**MCUR 896 Literature in Medicine (3 QH)**
Literature in Medicine is an exploration of the role literature plays in shaping one's identity as a physician and connecting to the patient’s experience. At this potent time of transition from medical student to a resident, this course offers a broad reflection on one’s own evolving identity as a physician. In small groups, working online with a faculty facilitator, students will read and discuss two books (one fiction and one non-fiction). Each student also submits two papers: a Personal Story and a Critical Incident essay.

**MDER 804 Dermatology (1.5-12 QH)**
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in dermatology. Students will gain familiarity with the diagnostic techniques used to diagnose dermatologic disorders. Students will also learn when it is appropriate to initiate a referral to a dermatologist.
MDER 805 Dermatology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MDER 840 Pediatric Dermatology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in pediatric dermatology. Students will gain familiarity with the diagnostic techniques used to diagnose dermatologic disorders in the pediatric population. Students will also learn when it is appropriate to initiate a referral.

MDER 841 Pediatric Dermatology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MDER 880 Dermatology Sub-Specialty (1.5-12 QH)
The purpose of this course is to provide students with experience in a sub-specialty of dermatology, such as cosmetic dermatology, Mohs surgery, or dermatopathology.

MDER 881 Dermatology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MDER 888 Dermatology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of dermatology in a virtual or other non-clinical setting.

MDER 889 Dermatology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MDER 898 Dermatology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of dermatology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MDGH 600 Sophomore Clinical Experience in Low-Resource Local Communities (1-2 QH)
Students will work in a local clinical setting to gain exposure to clinical, cultural, and economic practices in underserved populations. Under the direction of healthcare professionals, students will take and observe the history and physical exams, and provide health care screening and education to patients. Students must complete 20 clinical hours during the school year. These hours can be done at different clinics. Clinical sites can include the Interprofessional Community Clinic (ICC), New Life Volunteering Society (NLVS), Old Irving Park, and the RFUHC Community Care Coach.

MDGH 602 Emerging Issues in Global Health (1 QH)
An introduction to the major competencies for responsible participation in global health initiatives. Students will learn to distinguish issues in providing medical care in different countries, in under-resourced areas, and with language groups other than their own. Students will
develop techniques for assessing their attitudes toward different cultures and language groups, and evaluate the competencies, skills and strengths they can bring to global health initiatives.

**MDGH 607 Clinical Experiences in a Developing Country (2 QH)**
This elective facilitates the development of the qualities and abilities necessary to work globally as a physician. Students will learn about the health care system, clinical practices, and culture of the host country and will be able to compare and contrast the clinical practices and health care systems of the local community with those in the United States. This elective is offered in the summer between the first and second year of medical school. A patient log, an essay, and a presentation are required. This elective may only be completed at approved Global Health/International Experience sites.

**MDGH 625 Interprofessional Clinic Initiative: Executive Officer Administration and Clinical Fellowship (2 QH)**
The Executive Officers (EO) of the Interprofessional Clinic Initiative (ICI) design and develop administrative projects benefiting the Interprofessional Community Clinic (ICC), while working interprofessionally with students and faculty to operate the clinic. Barriers to health care are most often initially realized by the healthcare practitioners, while administrative efforts are key to overcoming these barriers (e.g. developing interpreter relationships to overcome language barriers, transportation programs to overcome geographical barriers, etc.) Combining both aspects involved in healthcare delivery will give students a unique opportunity to further their development as future healthcare professionals.

**MDGH 800 Global Health (6-12 QH)**
This elective facilitates development of qualities and abilities necessary to work globally as a physician. Students have the opportunity to refine and develop educational, professional and personal goals and objectives that will support: (1) pursuit of their vision in global health and (2) acquisition of the abilities necessary to address the health needs of the people of the world, especially the poor, with compassion, integrity, high ethical standards and a high level of competence. Students may arrange any combination of clinical, development or research experience for one to eight weeks outside the borders of the United States and Canada under the direction of the course director.

**MDGH 801 Senior Clinical Experience in Low-Resource Local Communities (1.5-6 QH)**
This senior elective facilitates the development of the qualities and abilities necessary to work in low-resource settings as a physician. Through this elective, students are provided with opportunities to refine and develop educational, professional and personal goals and objectives that will support: (1) pursuit of their vision in serving underserved communities and (2) acquisition of the abilities necessary to address the health needs of underserved populations with compassion, integrity, high ethical standards and a high level of competence. Students identify and develop a clinical, research or program/project development experience for a medically underserved area or population in the United States.

**MDGH 803 International Health Care (6-12 QH)**
This elective is designed to expose students to health systems and physicians of high resource countries other than the United States. These physicians and systems would serve as role models and we expect that future physicians adapt some of their decision-making process from these international role models. At the end of this elective, students will be able to clinically evaluate the strengths and weaknesses of the US Health Care System in comparison to the country visited.
MDGH 805 Global Health (Non-Clinical) (1.5-12 QH)
This course facilitates development of qualities and abilities necessary to work globally as a physician. Students have the opportunity to refine and develop educational, professional and personal goals and objectives that will support: (1) pursuit of their vision in global health and (2) acquisition of the abilities necessary to address the health needs of the people of the world, especially the poor, with compassion, integrity, high ethical standards and a high level of competence. Students may arrange any combination of virtual global health or research experiences outside the borders of the United States and Canada under the direction of the course director.

MDGH 808 International Health Care (Non-Clinical) (1.5-12 QH)
This course is designed to expose students to health systems and physicians of high resource countries other than the United States. These physicians and systems would serve as role models and we expect that future physicians adapt some of their decision-making process from these international role models. At the end of this virtual development or research elective experience, students will be able to clinically evaluate the strengths and weaknesses of the U.S. Health Care System in comparison to the subject country.

MEDX 529A & B same as HIPS 515A & B
MEDX 780 same as YELP 708

MELC 888 M4 Elective (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore clinical topics in a virtual or other non-clinical setting. To earn credit, students must obtain administrative approval from the host institution and the Office of Medical Education.

MELC 889 M4 Extramural Elective (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MELC 898 M4 Enrichment Elective (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore additional clinical topics in a virtual or other non-clinical setting for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MEMG 702 Emergency Medicine (6 QH)
Students learn the principles of prioritization of potentially life- or limb-threatening conditions and how to approach the acutely ill or injured patient with a focused history and physical exam. Procedures taught in Year 2 are performed in the Emergency Department setting with attention to universal precautions and personal safety. A series of lecture/discussion group sessions are conducted by the faculty from Emergency Medicine addressing the major clinical presentations.

MEMG 800 Emergency Medicine Sub-Internship (6 QH)
Under direct faculty supervision, fourth year students are given primary responsibility for patient care in the Emergency Department. During this rotation, students expand their ability to think critically, assess their own knowledge, and skills, and make decisions affecting patient care in the acute setting. The student will be scheduled to work 40 hours weekly (including overnight shifts and weekends).
MEMG 810 Advanced Emergency Medicine (1.5-12 QH)
During this course, students are given increased responsibility for the independent evaluation of patients with urgent or emergent problems. An emphasis is placed on acquiring skills in prioritizing, rapid assessment, formulating a working differential diagnosis, and cost-effective decision-making in the evaluation, management and disposition of acutely ill and injured patients.

MEMG 811 Advanced Emergency Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MEMG 820 Pediatric Emergency Medicine (1.5-12 QH)
This course provides students the opportunity to improve their ability to care for infants, children, and adolescents with acute, undifferentiated illness and injury. Students will become familiar with various emergency department procedures, such as lumbar puncture, incision/drainage, minor suturing, and splinting.

MEMG 821 Pediatric Emergency Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MEMG 880 Emergency Medicine Sub-Specialty (1.5-12 QH)
The purpose of this course is to provide students with experience in a subspecialty of emergency medicine.

MEMG 881 Emergency Medicine Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MEMG 888 Emergency Medicine (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of emergency medicine in a virtual or other non-clinical setting.

MEMG 889 Emergency Medicine Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MEMG 898 Emergency Medicine Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of emergency medicine for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MENT 808 Otolaryngology (ENT) (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered diseases of the ear, nose, and throat. Experiences will be in the ambulatory and surgical setting. Students will gain familiarity with the diagnostic procedures used in this specialty and learn when it is appropriate to initiate a referral to an otolaryngologist.
MENT 809 Otolaryngology (ENT) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MENT 820 Pediatric Otolaryngology (ENT) (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered diseases of the ear, nose, and throat in the pediatric population. Students will gain familiarity with the diagnostic procedures used in this specialty and learn when it is appropriate to initiate a referral to a pediatric otolaryngologist.

MENT 821 Pediatric Otolaryngology (ENT) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MENT 880 Otolaryngology (ENT) Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of otolaryngology.

MENT 881 Otolaryngology (ENT) Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MENT 888 Otolaryngology (ENT) (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of otolaryngology in a virtual or other non-clinical setting.

MENT 889 Otolaryngology (ENT) Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MENT 898 Otolaryngology (ENT) Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of otolaryngology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MFPM 600 Lesbian, Gay, Bisexual, Transgender, Queer and Intersex Health Care (1 QH)
This course covers Lesbian, Gay, Bisexual, Transgender, Queer and Intersex (LGBTQI) healthcare disparities, barriers to care and strategies to address these disparities and barriers to promote better care for LGBTQI people. Beginning with terminology, demographics and discrimination against LGBTQI patients in healthcare, topics will include LGBTQI healthcare disparities in youth, adults, older people and issues unique to the transgender and gender nonconforming community. We will discuss how to get to know your patient’s orientation and gender identify, how to provide a safe and welcoming environment and strategies to address LGBTQI disparities and promote health in LGBTQI people and their families. The course will employ faculty lectures, role playing, case discussions, and student presentations.
MFPM 701 Family Medicine/Primary Care Clerkship (9QH)
Students master the core content of Family Medicine as determined by The Society of Teachers of Family Medicine during this required clerkship. The experience is ambulatory in nature. Students will become familiar with presentations of signs and symptoms of different diagnoses through their clinical experiences and management of issues common in a Family Medicine practice. Students will practice presentation and documentation of patient encounters, information mastery, and topics related to patient safety, chronic diseases, preventive medicine, geriatrics, and sports medicine. Feedback is given by the Clerkship Director, and by supervising physicians at each site. Students complete a midterm self-assessment which is reviewed with a supervising physician in which students reflect on their own practice of medicine, and seek and receive feedback. Students demonstrate competence in reading basic EKGs by successfully passing an online EKG quiz. Students write a reflection on an ethical situation from their clinic including review of literature addressing that issue, and they review and comment on a peer’s ethical reflection. In addition to core didactic education and clinical experiences, students will engage in interactive virtual patient cases.

MFPM 805 Family Medicine Sub-Internship (6 QH)
On this rotation, students are part of the adult family medicine inpatient care team. Students present and document comprehensive histories and physical examinations, manage patients according to standard clinical practices, develop differential diagnoses, and initiate orders for testing and treatment of patients.

MFPM 820 Advanced Family Medicine (1.5-12 QH)
This course provides students with the opportunity to enhance the knowledge and skills acquired on the family medicine clerkship. Students will better understand the approach to common family medicine problems and the importance of comprehensive health care for people of all ages.

MFPM 821 Advanced Family Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MFPM 826 Outpatient Family Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to family medicine in an entirely outpatient setting.

MFPM 827 Outpatient Family Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MFPM 828 Inpatient Family Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to the unique approach to the care of family medicine patients in the hospital setting. This rotation illustrates the breadth and scope of practice provided in the hospital by family physicians and emphasizes the importance of maintaining the continuity relationship.
MFPM 829 Inpatient Family Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MFPM 880 Family Medicine Sub-Specialty (1.5-12 QH)
The purpose of this course is to provide students with experience in a subspecialty of family medicine.

MFPM 881 Family Medicine Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MFPM 888 Family Medicine (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of family medicine in a virtual or other non-clinical setting.

MFPM 889 Family Medicine Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MFPM 898 Family Medicine Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of family medicine for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MFSH 600 Sophomore Research (1-3 QH)
This elective provides students the opportunity to participate in research during the M2 year that is complementary to the student’s overall medical school experience. Students who choose to do this elective are responsible for identifying a research advisor to provide guidance and supervision.

MFSH 601 Anatomy Lab Teaching Assistant (1-2 QH)
Teaching Assistants will be available for a minimum of 10 hours during laboratory sessions for the Clinical Anatomy course. The responsibilities of the teaching assistants may include, but are not limited to, assisting with dissection during laboratory time, tagging for laboratory exams, and grading laboratory exams. Students who take this elective for credit cannot also serve as paid Anatomy T/A's.

MFSH 602 Exploring Career Paths in Medicine (1 QH)
Exploring Career Paths in Medicine is an experiential course designed to guide second year medical students through activities that will provide for insight into self and career path options. Students will participate in interactive and didactic sessions where they will have the opportunity to present and discuss what they have learned about themselves and the career paths they are investigating. Students will have the opportunity to select physicians with whom they will meet for informational interviews. Experiences within the clinical setting will include observerships and participation in grand rounds. All students will be required to complete self-reflection activities which include journaling and completion of self-assessment tools.
MFSH 700 Third Year Research (1.5-6 QH)
This elective provides students the opportunity to participate in research during the M3 year that is complementary to the student’s overall medical school experience. Students who choose to do this elective are responsible for identifying a research advisor to provide guidance and supervision. The elective director will work with the research advisor to ensure that all relevant CMS policies and procedures (duty hours, student treatment, secure storage, exposure, etc.) are upheld. At the end of this elective, the M3 student will demonstrate knowledge of fundamental concepts of research, including ethics, literature review, obtaining data, and preparing or submitting for publication.

MFSH 800 Fourth Year Research (1.5-12 QH)
This elective provides students the opportunity to participate in research during the M4 year that is complementary to the student’s overall medical school experience. Students who choose to do this elective are responsible for identifying a research advisor to provide guidance and supervision. The elective director will work with the research advisor to ensure that all relevant CMS policies and procedures (duty hours, student treatment, secure storage, exposure, etc.) are upheld. At the end of this elective, the M4 student will demonstrate knowledge of fundamental concepts of research, including ethics, literature review, obtaining data, and preparing or submitting for publication.

MMDC 802 Hospital Medicine (1.5-12 QH)
The purpose of this course is to prepare students to care for hospitalized patients with common internal medicine conditions. Students will work with a hospitalist group and are expected to function at the level of a sub-intern.

MMDC 803 Hospital Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 812 Pulmonary Medicine (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in pulmonary medicine. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pulmonologist.

MMDC 813 Pulmonary Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 818 Cardiology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in cardiology and to become familiar with diagnostic techniques used to diagnose cardiac disorders including stress testing, cardiac echocardiography and cardiac catheterization. Students will also learn when it is appropriate to initiate a referral to a cardiologist.

MMDC 819 Cardiology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MMDC 820 Rheumatology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in rheumatology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a rheumatologist.

MMDC 821 Rheumatology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 830 Gastroenterology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered gastrointestinal diseases and to become familiar with diagnostic techniques used to diagnose these disorders, such as upper endoscopy, colonoscopy, and liver biopsy. Students will also learn when it is appropriate to initiate a referral to a gastroenterologist.

MMDC 831 Gastroenterology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 842 Endocrinology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered disease of the endocrine system and to become familiar with diagnostic techniques used to diagnose these disorders. Students will also learn when it is appropriate to initiate a referral to an endocrinologist.

MMDC 843 Endocrinology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 844 Hematology/Oncology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in hematology and oncology and to become familiar with diagnostic techniques used to diagnose these disorders. Students will also learn when it is appropriate to initiate a referral to a hematologist/oncologist.

MMDC 845 Hematology/Oncology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 854 Medical Critical Care (MICU) (1.5-12 QH)
During this course, students will learn the basic clinical skills, knowledge and procedures to treat patients in the Medical Intensive Care Unit, including conditions such as acute respiratory failure, myocardial infarction, sepsis, uncontrolled upper and lower gastrointestinal bleeding, severe acid/base disorders, and acute renal failure. Students will gain fundamental knowledge of current techniques and treatment strategies, including hemodynamic monitoring, ventilator support, vasopressor support and sepsis care.
MMDC 855 Medical Critical Care (MICU) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 856 Nephrology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in nephrology, including acute and chronic renal failure, glomerular and tubulointerstitial diseases, nephrolithiasis and hypertension, acid-base disorders, and electrolyte disturbances. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a nephrologist.

MMDC 857 Nephrology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 862 Infectious Disease (1.5-12 QH)
This course is designed to provide students with a broad experience in clinical infectious disease. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to an infectious disease specialist.

MMDC 863 Infectious Disease Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 872 Hematology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in hematology and to become familiar with diagnostic techniques used to diagnose these disorders. Students will also learn when it is appropriate to initiate a referral to a hematologist.

MMDC 873 Hematology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 874 Oncology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in oncology. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to an oncologist.

MMDC 875 Oncology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 880 Internal Medicine Sub-Specialty (1.5-12 QH)
The purpose of this course is to provide students with experience in a subspecialty of internal medicine.
MMDC 881 Internal Medicine Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMDC 888 Internal Medicine (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of internal medicine in a virtual or other non-clinical setting.

MMDC 889 Internal Medicine Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MMED 614 Research in Clinical Diabetes (2-3 QH)
This elective addresses healthcare outcomes of patients with diabetes in relation to evaluation of current and innovative therapies and complications.

MMED 700 Internal Medicine Clerkship (12 QH)
This required clerkship presents the student with a basic core of information in internal medicine. The student is provided with practical experience at the bedside, and formal work and teaching rounds. Techniques of clinical diagnosis and management, including diagnostic and therapeutic medical procedures, are demonstrated and, in appropriate instances, performed by the clinical clerks with faculty guidance. Subspecialty rounds, clinical conference, clinical-pathological conference and medical grand rounds complement the clerkship experience. Case seminar series provide a core curriculum supplemented by specific assignments, reference to current medical literature and supplementary sources of written and audiovisual instruction.

MMED 800 Internal Medicine Sub-Internship (6 QH)
The sub-internship in Internal Medicine provides an opportunity to serve as an active member of a resident-intern-student team, intimately involved in the acute care of adult patients on the inpatient medical service. The rotation permits the student to serve as an “acting intern” as a means of improving his or her understanding of the pathophysiology of disease, clinical skills, physical and laboratory examinations, and knowledge and judgment in clinical medicine. The full teaching program includes attending rounds, subspecialty conferences and weekly medical grand rounds.

MMIC 630 Research in Microbiology: Role of KSHV in Oncogenes (2 QH)
The student will be learning important basic science research techniques that are in high demand in the laboratory settings. Some of the techniques include, but are not limited to, real-time reverse transcription polymerase chain reaction, western blots, immunofluorescence assays, etc. Most important, however, the student will be applying these techniques to address a particular scientific hypothesis on a particular aspect of the biology behind Kaposi sarcoma-associated herpes virus and the host cell.

MMIC 643 Advanced Immunology (3 QH)
This elective is designed for students seeking an in-depth knowledge of contemporary immunology.
MMIC 652 Parasite Immunology (Research) (1 QH)
This course trains students to become familiar with aspects of molecular biology and
immunology of medically important parasites with particular reference to leishmaniasis.
Emphasis will be placed on the mechanisms of host-parasite interactions in vitro and evasion of
host immunity.

MMIC 660 Molecular Biology and Immunochemistry of the Immune System (Research) (1
QH)
Students learn research methodologies, perform experiments, write up results and participate in
discussions. Cell culture, isolation of nucleic acids, mapping and manipulating of cloned genes,
SDS-PAGE of proteins, radioimmunoassays and ELISA and flow cytometry are included.
Students have actual laboratory research experience in studies in molecular biology of the
immune system.

MMTD 509 Clinical Epidemiology (1.5 QH)
Clinical Epidemiology will introduce students to the basic principles of public health and
epidemiology, including their application to the problem of healthcare disparities and
development of activities that benefit the health status of populations. It covers the principles and
methods of epidemiologic investigation including epidemiologic study designs for investigating
the etiology of disease. Students will also learn basic quantitative measures to determine
association and risk. Topics will include probability, correlation & regression, incidence &
prevalence, along with various sources of bias and confounding. Students will be required to
develop a research question using the PICO method (Population, Intervention, Comparison,
Outcome), to evaluate the evidence in the literature, and to present their findings to their peers.

MMTD 510 Bioethics (2 QH)
Bioethics is a course designed to show that moral theories and social political frameworks are
necessary for the advancement of social healthcare policy and patient centered decision-making.
Topics covered will include: Deontological and Utilitarian Theories; Social Political Philosophy,
Codes of Ethics, Principlism, Informed Consent, Competency, Types of Information
Disclosures, Institutional Review Boards (IRBs), CITI Clinical Certification and mastery of:
USMLE Ethics Guidelines and Accreditation Council for Pharmacy Education (ACPE)
Standards.

MMTD 601 Patient Safety (2 QH)
The three main themes of the course are Prevention and Screening, Healthcare Law, and Patient
Safety. The course includes lectures, conferences, online modules, reading assignments, and a
simulated hospital experience.

MNEU 700 Neurology Clerkship (6 QH)
This required clerkship prepares students to recognize and begin the management of patients
with neurologic conditions, to demonstrate the ability to perform a complete and reliable
neurologic history and examination, and to continue their progress toward achieving the school’s
educational competencies. The student is provided with practical experience at the bedside,
clinics and teaching rounds, as well as varied learning environments including online quizzes,
essay assignments and simulated patient experiences. The clerkship includes an introduction to
neuroradiology, neurological disorders review and a neurologic exam practicum. Students
interact with patients with a wide variety of neurological conditions on both outpatient and
inpatient services under the preceptorship of neurology attendings and residents. Students’
participation in small- and large-group discussions, didactic presentations, workshops and
conferences is required, facilitated and supervised by preceptors at specific training sites. These activities ensure continued learning and application of the principles and practice of neuroscience and clinical neurology, and ensure that students’ learning experiences in neurology are an integral contribution to progress in becoming competent physicians.

**MNEU 800 Neurology Sub-Internship (6 QH)**
The CMS Neurology Sub-internship is a 4-week clinical rotation designed for a 4th year CMS student interested in pursuing residency training in neurology. This sub-internship prepares students to perform a complete and reliable neurologic history and physical examination, generate neurological differential diagnoses using appropriate and sound clinical reasoning, and recognize the management of patients with neurologic conditions. The students are provided with a complete clinical inpatient experience at the bedside, teaching rounds, conferences, as well as varied learning environments.

**MNEU 820 Advanced Neurology (1.5-12 QH)**
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in neurology. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a neurologist.

**MNEU 821 Advanced Neurology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MNEU 826 Inpatient Neurology (1.5-12 QH)**
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in neurology in the inpatient setting. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a neurologist.

**MNEU 827 Inpatient Neurology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MNEU 828 Outpatient Neurology (1.5-12 QH)**
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in neurology in the outpatient setting. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a neurologist.

**MNEU 829 Outpatient Neurology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MNEU 840 Pediatric Neurology (1.5-12 QH)**
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in pediatric neurology. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a pediatric neurologist.
MNEU 841 Pediatric Neurology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MNEU 858 Neuro Intensive Care (Neuro-ICU) (1.5-12 QH)
The purpose of this course is to give students exposure to the specialty of neurocritical care. Students will gain knowledge and skills in all aspects of critical care, with specific focus on the care of patients with central nervous system disorders or injury.

MNEU 859 Neuro Intensive Care (Neuro-ICU) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MNEU 872 Headache (1.5-12 QH)
This course provides students with experience in the diagnosis and management of common and complex causes of headache. Students will become familiar with pharmacological, non-pharmacological, and interventional therapies used in caring for patients with headache.

MNEU 873 Headache Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MNEU 880 Neurology Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of neurology. Students will gain familiarity with the diagnostic techniques used in the specialty and learn when it is appropriate to initiate a referral to a specialist.

MNEU 881 Neurology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MNEU 888 Neurology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of neurology in a virtual or other non-clinical setting.

MNEU 889 Neurology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MNEU 898 Neurology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of neurology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.
MNSC 603 Research in Neuroscience (1-2 QH)
The Department of Neuroscience offers student research training opportunities in a number of
disciplines, to be arranged by the faculty advisors.

MNSC 605 Human Brain Dissection (1 QH)
This course offers advanced dissection of human brain specimens to reveal the major gray matter
structures and white matter pathways involved in reward, language, emotion, learning and other
higher cognitive functions, with an emphasis on structures involved in neurologic and psychiatric
disorders.

MNSR 802 Neurosurgery (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered
problems in neurosurgical diseases. Students will gain familiarity with the diagnostic techniques
used in the field and determining when it is appropriate to initiate a referral to a neurosurgeon.

MNSR 803 Neurosurgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another
medical school or healthcare organization. Learning activities and assessment methods are
specified by the host institution.

MNSR 880 Neurosurgery Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered
problems in a sub-specialty of neurosurgery. Students will gain familiarity with the diagnostic
techniques used in the field and determining when it is appropriate to initiate a referral to a
specialist.

MNSR 881 Neurosurgery Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another
medical school or healthcare organization. Learning activities and assessment methods are
specified by the host institution.

MNSR 888 Neurosurgery (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of neurosurgery in a virtual
or other non-clinical setting.

MNSR 889 Neurosurgery Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another
medical school or healthcare organization. Learning activities and assessment methods are
specified by the host institution.

MNSR 898 Neurosurgery Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of neurosurgery for
educational enrichment once they have reached the maximum allowable credit that can be
applied toward degree requirements.

MOBG 700 Obstetrics/Gynecology Clerkship (9 QH)
This required clerkship provides the student with experience in all aspects of obstetrics and
gynecology. This includes general obstetrics and gynecology and the subspecialties of
endocrinology, oncology and perinatology. In addition to the department's regular conference
schedule and rounds, there are specific didactic sessions for students. These sessions include a
lecture series covering the core curriculum. Student/faculty interaction is enhanced through small
preceptor group meetings.
MOBG 804 Advanced Obstetrics and Gynecology (1.5-12 QH)
This course provides an opportunity for students to learn more about the field of obstetrics and gynecology and to experience the variety of clinical exposures that this specialty offers.

MOBG 805 Advanced Obstetrics and Gynecology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 812 Outpatient Obstetrics and Gynecology (1.5-12 QH)
This course provides an opportunity for students to learn more about the field of obstetrics and gynecology and to experience the variety of clinical exposures that this specialty offers which are unique to the outpatient setting.

MOBG 813 Outpatient Obstetrics and Gynecology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 816 Gynecology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of gynecology.

MOBG 817 Gynecology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 828 Minimally Invasive Gynecology (1.5-12 QH)
This course focuses on the diagnosis, treatment, and follow-up of benign gynecologic disorders, such as pelvic pain, infertility, abnormal bleeding, fibroids, endometriosis, and adnexal masses.

MOBG 829 Minimally Invasive Gynecology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 844 Maternal-Fetal Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of perinatology.

MOBG 845 Maternal-Fetal Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 858 Urogynecology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of urogynecology.

MOBG 859 Urogynecology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MOBG 862 Gynecologic Oncology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of gynecologic oncology.

MOBG 863 Gynecologic Oncology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 880 Obstetrics and Gynecology Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of obstetrics and gynecology. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a specialist.

MOBG 881 Obstetrics and Gynecology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 888 Obstetrics and Gynecology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of obstetrics and gynecology in a virtual or other non-clinical setting.

MOBG 889 Obstetrics and Gynecology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOBG 898 Obstetrics and Gynecology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of obstetrics and gynecology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MOPH 608 Clinical Ophthalmology Lecture Series – CMS (1 QH)
Clinically based lectures on ophthalmology will focus on glaucoma, retina, cataracts, corneal nerve, refractive surgery and oculoplastics.

MOPH 810 Ophthalmology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of ophthalmology.

MOPH 811 Ophthalmology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOPH 820 Pediatric Ophthalmology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of pediatric ophthalmology.
MOPH 821 Pediatric Ophthalmology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOPH 880 Ophthalmology Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of ophthalmology. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a specialist.

MOPH 881 Ophthalmology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOPH 888 Ophthalmology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of ophthalmology in a virtual or other non-clinical setting.

MOPH 889 Ophthalmology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MOPH 898 Ophthalmology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of ophthalmology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MORT 802 Orthopedic Surgery (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of orthopedic surgery.

MORT 803 Orthopedic Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MORT 820 Pediatric Orthopedic Surgery (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of pediatric orthopedic surgery.

MORT 821 Pediatric Orthopedic Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MORT 880 Orthopedic Surgery Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of orthopedic surgery. Students will gain familiarity with the
diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a specialist.

**MORT 881 Orthopedic Surgery Sub-Specialty Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MORT 888 Orthopedic Surgery (Non-Clinical) (1.5-12 QH)**
This course provides students the opportunity to explore the specialty of orthopedic surgery in a virtual or other non-clinical setting.

**MORT 889 Orthopedic Surgery Extramural (Non-Clinical) (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MORT 898 Orthopedic Surgery Enrichment Elective (1.5-12 QH)**
This course provides students the opportunity to explore the specialty of orthopedic surgery for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

**MOSA 510 Principles of Professionalism, Health Care, and Health Equity I (1.5 QH)**
This course is the first in a longitudinal series of courses, which prepares the student for the practice of medicine in the contemporary social and cultural healthcare environment. Students will be introduced to selected topics that may include professionalism, ethical challenges in clinical practice, health disparities and healthcare inequities, social determinants of health, medical humanities in an era of technology, structural racism, sexism, sexual and gender minority (SGM) bias and other discrimination, and implicit bias. Students will engage in multiple learning modalities, which may include lectures, small group discussions, patient panels, and written reflections.

**MOSA 610 Principles of Professionalism, Health Care, and Health Equity II (1 QH)**
This course is the second in a longitudinal series of courses, which prepares the student for the practice of medicine in the contemporary social and cultural healthcare environment. Students will apply previous course learning and experiences to identify strategies to achieve health equity in clinical practice. Selected topics may include professionalism, ethical and cultural challenges in clinical practice, healthcare disparities and inequities, social determinants of health, medical humanities in an era of technology, structural racism, sexism, sexual and gender minority (SGM) bias and other discrimination, and implicit bias. Students will engage in multiple learning modalities, which may include lectures, small group discussions, patient panels, and written reflections.

**MOSA 710 Principles of Professionalism, Health Care, and Health Equity III (1 QH)**
This course is the third in a longitudinal series of courses, which prepares the student for the practice of medicine in the contemporary social and cultural healthcare environment. Students will be challenged to integrate previous course learning and experiences to this advanced course, including application to various clinical settings. Selected topics may include the human experience in narrative form, combating structural racism and discrimination in healthcare, personal beliefs and biases, medical professionalism, the physician’s role in the community, self-
care, ethical and cultural challenges, and the development and implementation of solutions to eliminate health disparities and healthcare inequities. Students will engage in multiple learning modalities, which may include lectures, small group discussions, patient panels, and written reflections.

**MOSA 810 Principles of Professionalism, Health Care, and Health Equity IV (1 QH)**
This course is the final in a longitudinal series of courses, which prepares the student for the practice of medicine in the contemporary social and cultural healthcare environment, and equips students to advance health equity as physicians. Students will be expected to demonstrate an advanced level of integration, including the development of evidence-based strategies for lifelong learning and continued reflection on these topics throughout one’s career. Selected topics may include interaction with patients with common clinical conditions, healthcare economics, organizational medicine, physician as patient, addressing inequity within healthcare, conflicts of interest, physician-pharmaceutical relations, mentoring, the physician’s role in the community, self-improvement, and self-care. Students will engage in multiple learning modalities, which may include lectures, small group discussions, patient panels, and written reflections.

**MPAT 600A, B & C General and Systemic Pathology (12.5 QH)**
This course covers the biologic bases and mechanisms of disease, including inflammation and repair, and cell injury by infectious, immunologic, vascular, genetic, physical, chemical and neoplastic mechanisms, followed by a beginning survey of disease with emphasis on clinical pathologic correlations.

**MPAT 601 Honors Pathology (2 QH)**
This course is offered by invitation to a limited number of M2 students. Invitations are ordinarily extended to students that are “high achievers” in the M1 year. Other students may participate at the option of the course director as availability of preceptors allows. The student will apply basic principles learned in the pathology lectures throughout the M1 year in evaluating patient specimens submitted to a pathology department. To provide more detailed histopathological analytical experience. To gain understanding of the work-up of surgical pathology and autopsy specimens. To better understand a pathologist’s role in clinical diagnosis and patient care.

**MPED 700 Pediatrics Clerkship (9 QH)**
On this required clerkship, students rotate through ambulatory and inpatient pediatric units, neonatology and the emergency room. Didactic teaching is presented in the form of lectures, seminars, individual presentations, ward rounds and student bedside rounds.

**MPED 800 Pediatric Hospital Medicine (1.5-12 QH)**
The purpose of this course is to provide students exposure to the pediatric inpatient service. Students will gain familiarity with diagnostic work up and management of medical disorders in infants, children, and/or young adults.

**MPED 801 Pediatric Hospital Medicine Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MPED 805 Pediatric Sub-Internship (6 QH)
The pediatric sub-internship provides the senior medical student an opportunity to function, with supervision, as the primary caretaker of inpatients on pediatric and adolescent units. During the rotation, the student will be expected to improve clinical skills by performing history and physical examinations, developing problem lists of differential diagnoses, forming final physiological assessments, and outlining appropriate diagnostic and therapeutic plans.

MPED 822 Pediatric Gastroenterology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric gastroenterology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric gastroenterologist.

MPED 823 Pediatric Gastroenterology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 824 Pediatric Pulmonology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric pulmonology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric pulmonologist.

MPED 825 Pediatric Pulmonology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 826 Pediatric Rheumatology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric rheumatology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric rheumatologist.

MPED 827 Pediatric Rheumatology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 830 Pediatric Critical Care (PICU) (1.5-12 QH)
Students rotating on the PICU service will be exposed to the care of critically ill children. Students will gain fundamental knowledge of current techniques and treatment strategies.

MPED 831 Pediatric Critical Care (PICU) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 832 Pediatric Cardiology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric cardiology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric cardiologist.
MPED 833 Pediatric Cardiology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 834 Pediatric Hematology/Oncology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric hematology/oncology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric hematologist/oncologist.

MPED 835 Pediatric Hematology/Oncology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 850 Adolescent Medicine (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of adolescent medicine.

MPED 851 Adolescent Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 872 Pediatric Nephrology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric nephrology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric nephrologist.

MPED 873 Pediatric Nephrology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 876 Pediatric Infectious Disease (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered infectious diseases in infants, children, and/or young adults. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric infectious disease specialist.

MPED 877 Pediatric Infectious Disease Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 878 Pediatric Endocrinology (1.5-12 QH)
The purpose of this course is to provide students exposure to commonly encountered problems in pediatric endocrinology. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a pediatric endocrinologist.
MPED 879 Pediatric Endocrinology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 880 Pediatric Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a pediatric sub-specialty. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a specialist.

MPED 881 Pediatric Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 882 Neonatology (NICU) (1.5-12 QH)
The purpose of this course is to provide students with a broad understanding of medical problems experienced by infants and generally applicable principles in the NICU setting.

MPED 883 Neonatology (NICU) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 884 Pediatric Ambulatory Care (1.5-12 QH)
In this course, students will learn to diagnose and care for acute and chronic medical problems in the ambulatory setting.

MPED 885 Pediatric Ambulatory Care Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 886 Pediatric Development (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of clinical pediatric development.

MPED 887 Pediatric Development Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPED 888 Pediatrics (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of pediatrics in a virtual or other non-clinical setting.

MPED 889 Pediatrics Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MPED 894 Juvenile Detention Correctional Medicine (1.5-12 QH)
This course will allow students to participate in the health care of juvenile detention correctional residents. Students enrolling in this experience must understand the elevated level of professionalism that will be demanded of them in the detention environment along with the increased importance of confidentiality.

MPED 895 Juvenile Detention Correctional Medicine Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPHY 609 Cardiovascular Pathophysiology (2 QH)
Clinical aspects of cardiovascular function are emphasized, e.g., heart sounds and murmurs, electrocardiogram, monitoring of central venous pressure and cardiac function curves.

MPHY 620 Integrative Physiology (2 QH)
In this elective, students will learn to solve problems in the various disciplines of Physiology. This elective is expressly geared to prepare the student for USMLE Step 1.

MPHY 624 Pulmonary Pathophysiology (2 QH)
This course is designed to help the student understand the pathophysiologic basis of pulmonary disease. Basic respiratory physiology (and some cardiovascular physiology) will be reviewed. Case reports of patients with pulmonary diseases will be presented and discussed.

MPHY 626 Research in Physiology (2-3 QH)
Students are given the opportunity to become involved in significant physiological research. In doing so, the student gains experience in designing experiments, operating modern research equipment, gathering meaningful data, evaluating experimental results and preparing the results for publication.

MPHY 627 Factors Influencing Fertility (1 QH)
The following topics will be covered in a series of one-hour weekly lectures: normal female reproductive cycle; the major causes of infertility; major methods of contraception; two of the major causes of infertility, endometriosis and polycystic ovaries (PCO); sperm physiology and in-vitro fertilization. Specific readings will be required, and there will be class discussion.

MPLA 802 Plastic and Reconstructive Surgery (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of plastic and reconstructive surgery.

MPLA 803 Plastic and Reconstructive Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPLA 880 Plastic Surgery Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of plastic surgery. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a specialist.
MPLA 881 Plastic Surgery Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPLA 888 Plastic Surgery (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of plastic surgery in a virtual or other non-clinical setting.

MPLA 889 Plastic Surgery Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPLA 898 Plastic Surgery Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of plastic surgery for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MPMR 600 Physical Medicine and Rehabilitation–A Medical Student Introduction (1 QH)
An overview of what the specialty has to offer as a provider and as a patient. Students will understand the breadth and scope of Physical Medicine and Rehabilitation as a field and its interaction with other medical disciplines as an outpatient clinician as well as after admission, develop and carry out patient management plans for the rehabilitation patient, understand healthy and active lifestyle changes and available interventions and their indications, and demonstrate an investigatory and analytic approach to clinical situations for inpatient and outpatient PM&R patients.

MPMR 810 Physical Medicine and Rehabilitation (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in physiatry. Students will gain familiarity with rehabilitation techniques and treatments and learn when it is appropriate to initiate a referral to a PM&R specialist. Students can expect to gain knowledge in diagnosis and treatment of common musculoskeletal disorders as well as exposure to EMGs and peripheral joint/Botox injections.

MPMR 811 Physical Medicine and Rehabilitation Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPMR 822 Inpatient Physical Medicine and Rehabilitation (1.5-12 QH)
This course will prepare students to assess patients for acute inpatient rehabilitation and to work as a member of an interprofessional team to develop and implement a comprehensive treatment plan.

MPMR 823 Inpatient Physical Medicine and Rehabilitation Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MPMR 824 Outpatient Physical Medicine and Rehabilitation (1.5-12 QH)
This course introduces students to outpatient physiatry. Students will become proficient at the musculoskeletal history and physical exam, as well as the procedures and therapies available to diagnose and treat musculoskeletal disorders and pain.

MPMR 825 Outpatient Physical Medicine and Rehabilitation Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPMR 840 Pediatric Physical Medicine and Rehabilitation (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in pediatric physiatry. Students will gain familiarity with rehabilitation techniques and treatments and determining when it is appropriate to initiate a referral to a PM&R or pediatric PM&R specialist.

MPMR 841 Pediatric Physical Medicine and Rehabilitation Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPMR 880 Physical Medicine and Rehabilitation Sub-Specialty (1.5-12 QH)
The purpose of this course is to provide students with experience in a subspecialty of physical medicine and rehabilitation.

MPMR 881 Physical Medicine and Rehabilitation Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPMR 888 Physical Medicine and Rehabilitation (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of physical medicine and rehabilitation in a virtual or other non-clinical setting.

MPMR 889 Physical Medicine and Rehabilitation Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPMR 898 Physical Medicine and Rehabilitation Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of physical medicine and rehabilitation for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MPSY 700 Psychiatry Clerkship (9 QH)
This is a required clerkship experience where students work as part of the psychiatric team where they participate in interviews and history taking, charting, triage and referral decisions. Students learn the treatment and care of psychiatric patients in the hospital and ambulatory setting. They also gain experience in consultation/liaison psychiatry. The classroom work consists of seminars on psychiatric emergencies, psychotherapy, behavior modification, liaison/consultation psychiatry, pediatric psychiatry, forensic and ethical psychiatry. Case conferences, grand rounds, and professor rounds are held regularly.
MPSY 800 Psychiatry Sub-Internship (6 QH)  
The CMS Psychiatry Sub-internship is a 4-week clinical rotation designed for a 4th year CMS student interested in pursuing residency training in psychiatry. This sub-internship prepares students to perform a comprehensive psychiatric interview and evaluation in order to generate a medical and psychiatric differential diagnosis using appropriate and sound clinical reasoning, and to recognize management of patients with psychiatric conditions incorporating a biopsychosocial formulation. The students are provided with a complete clinical inpatient experience at the bedside, teaching rounds, conferences, didactics with attendings and residents, as well as varied learning environments including electroconvulsive therapy, consult-liaison service, outpatient, geriatric inpatient, etc.

MPSY 806 Advanced Psychiatry (1.5-12 QH)  
The purpose of this course is to educate students regarding the principles and skills underlying the recognition and management of common psychiatric disorders. Students will gain familiarity with the diagnostic techniques used in this specialty and learn when it is appropriate to initiate a referral to a psychiatrist.

MPSY 807 Advanced Psychiatry Extramural (1.5-12 QH)  
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 820 Child and Adolescent Psychiatry (1.5-12 QH)  
The purpose of this course is to educate students regarding the principles and skills underlying the recognition and management of common psychiatric disorders in children and adolescents, such as anxiety, ADHD, mood disorders, conduct disorders, and substance abuse.

MPSY 821 Child and Adolescent Psychiatry Extramural (1.5-12 QH)  
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 828 Psychotherapy (1.5-12 QH)  
This course will expose senior medical students to the basics of psychotherapy theory and practice through required readings and patient care in inpatient and outpatient settings.

MPSY 829 Psychotherapy Extramural (1.5-12 QH)  
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 836 Inpatient Psychiatry (1.5-12 QH)  
This course provides students with exposure to the inpatient psychiatric service. Students will gain familiarity with the diagnostic evaluation and management of patients with psychiatric disorders requiring hospitalization.

MPSY 837 Inpatient Psychiatry Extramural (1.5-12 QH)  
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MPSY 838 Outpatient Psychiatry (1.5-12 QH)
This course will provide students with exposure to psychiatry in an entirely outpatient population.

MPSY 839 Outpatient Psychiatry Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 844 Consult and Liaison Psychiatry (1.5-12 QH)
This course will expose students to the evaluation and management of patients with psychiatric disorders in the medical and surgical setting.

MPSY 845 Consult and Liaison Psychiatry Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 880 Psychiatry Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of psychiatry. Students will gain familiarity with the diagnostic techniques used in the field and determining when it is appropriate to initiate a referral to a specialist.

MPSY 881 Psychiatry Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 888 Psychiatry (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of psychiatry in a virtual or other non-clinical setting.

MPSY 889 Psychiatry Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPSY 898 Psychiatry Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of psychiatry for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MPTH 804 Pathology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of clinical pathology.

MPTH 805 Pathology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MPTH 820 Surgical Pathology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of surgical pathology.

MPTH 821 Surgical Pathology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPTH 848 Forensic Pathology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of forensic pathology.

MPTH 849 Forensic Pathology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPTH 862 Clinical Microbiology (1.5-12 QH)
The purpose of this course is to provide students exposure to various aspects of clinical microbiology.

MPTH 863 Clinical Microbiology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPTH 880 Pathology Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of pathology.

MPTH 881 Pathology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPTH 888 Pathology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of pathology in a virtual or other non-clinical setting.

MPTH 889 Pathology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MPTH 898 Pathology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of pathology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MRAD 600 Diagnostic Radiological Imaging (1 QH)
This elective helps students develop skills in understanding the radiographic appearance of normal anatomical structures and variations of the normal and the contrast with common...
abnormalities encountered in clinical conditions. The course also deals with augmentation of the student’s skills in physical diagnosis and patient examination, demonstrating visually the normal and abnormal findings in simulated physical examination situations. Teaching is done in semiformal lecture format with radiographs selected from the teaching files of the department.

**MRAD 822 Interventional Radiology (1.5-12 QH)**
The purpose of this course is to provide students exposure to various aspects of interventional radiology.

**MRAD 823 Interventional Radiology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MRAD 834 Diagnostic Radiology (1.5-12 QH)**
During this course, students will acquire a basic understanding of radiographic anatomy, physiology, and pathology. Students will learn and understand routine procedures and augment skills in basic radiographic interpretation, cross-sectional imaging, and neuroradiology. Students will also gain an understanding of the role of the radiologist as a consultant.

**MRAD 835 Diagnostic Radiology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MRAD 840 Pediatric Radiology (1.5-12 QH)**
During this course, students will acquire a basic understanding of radiographic anatomy, physiology, and pathology in the pediatric population. Students will learn and understand routine procedures and augment skills in basic radiographic interpretation, cross-sectional imaging, and neuroradiology. Students will also gain an understanding of the role of the pediatric radiologist as a consultant.

**MRAD 841 Pediatric Radiology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MRAD 856 Neuroradiology (1.5-12 QH)**
The purpose of this course is to provide students exposure to various aspects of neuroradiology.

**MRAD 857 Neuroradiology Extramural (1.5-12 QH)**
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

**MRAD 870 Breast Imaging (1.5-12 QH)**
This course provides students with a comprehensive overview of breast imaging screening and diagnostic techniques, including Digital Breast Tomosynthesis (DBT), contrast enhanced breast MRI, and whole breast screening ultrasound. Students will be exposed to image guided interventional procedures such as needle localization prior to surgical biopsy, and steroetactic, ultrasound, and MRI-guided core biopsies.
MRAD 871 Breast Imaging Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MRAD 880 Radiology Sub-Specialty (1.5-12 QH)
This course provides students with experience in a sub-specialty of radiology.

MRAD 881 Radiology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MRAD 888 Radiology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of radiology in a virtual or other non-clinical setting.

MRAD 889 Radiology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MRAD 898 Radiology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of radiology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MRON 810 Radiation Oncology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in radiation oncology.

MRON 811 Radiation Oncology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MRON 888 Radiation Oncology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of radiation oncology in a virtual or other non-clinical setting.

MRON 889 Radiation Oncology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MRON 898 Radiation Oncology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of radiation oncology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.
MSUR 601 Elective in Orthopedics – Private Practice (1 QH)
The student, under the direction of the orthopedic surgeon in private practice, will observe history, exam and surgery. Fractured bones, osteoarthritis, rheumatoid arthritis, strains, low back discomfort and carpal tunnel syndrome are examples of some of the conditions that will be observed. Relevant clinical correlations to basic science courses will be evident. The student will arrange scheduled visits to the orthopedic office in Lincolnshire, IL, not to conflict with the academic schedule.

MSUR 700 Surgery Clerkship (12 QH)
During this required clerkship, students function as an integral member of the surgical team. Students learn to care for patients by participating in clinics, rounds, operative procedures, and on-call duties. In addition to the core lecture series and case-based discussion sessions, students attend the following regularly scheduled surgical conferences: radiology, pathology, tumor, morbidity and mortality, grand rounds, surgical GI conference, vascular, journal club, critical care, surgical indications, basic science, cardiothoracic, orthopedic, surgical nutrition and trauma.

MSUR 801 Surgery Sub-Internship (6 QH)
The General Surgery Sub-Internship is a 4-week, primarily inpatient rotation. Students will work as a part of a patient care team including 3rd year clerks, interns, residents, nurses, ancillary staff, and attending surgeons. Students will be expected to assume primary responsibility for a significant portion of the team's patient care, emphasizing preoperative and post-operative care. Students will be responsible for daily notes, presentations, pre and post-operative notes, daily handovers, and discharges and coordinate care for multiple patients throughout their hospitalization.

MSUR 810 Advanced General Surgery (1.5-12 QH)
This course provides students with the opportunity to enhance the knowledge acquired on the general surgery clerkship, to better understand the diagnosis and treatment of patients with surgical diseases, and to improve upon technical skills introduced during the third year.

MSUR 811 Advanced General Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 812 Minimally Invasive/Robotic Surgery (1.5-12 QH)
This course provides students with an introduction to minimally invasive robotic surgery.

MSUR 813 Minimally Invasive/Robotic Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 828 Trauma Surgery (1.5-12 QH)
The purpose of this course is to expose students to the comprehensive care of the trauma patient.

MSUR 829 Trauma Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MSUR 834 Colorectal Surgery (1.5-12 QH)
The purpose of this course is to provide students with exposure to the evaluation and care of patients with common problems of the colon and rectum. Students will become familiar with the evaluation, diagnostic techniques, and treatment options for patients and learn when it is appropriate to initiate referral to a colorectal surgeon.

MSUR 853 Colorectal Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 836 Surgical Oncology (1.5-12 QH)
The goal of this course is to introduce students to the principles of surgical oncology, prepare students to recognize and treat commonly encountered problems related to cancer, and to understand the surgeon’s role as a member of the multidisciplinary cancer team.

MSUR 837 Surgical Oncology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 840 Pediatric Surgery (1.5-12 QH)
This course provides students with an introduction to common surgical problems in infants and children.

MSUR 841 Pediatric Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 866 Vascular Surgery (1.5-12 QH)
This course will provide students with exposure to commonly encountered problems of the vascular system and familiarity with diagnostic techniques and therapeutic options of this specialty. Students will also learn indications for referral to vascular specialty care.

MSUR 867 Vascular Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 876 Cardiovascular Thoracic Surgery (CVT) (1.5-12 QH)
The purpose of this course is to provide students with exposure to the evaluation and care of patients with cardiologic surgery disease processes. Students will become familiar with the evaluation, diagnostic techniques, and treatment options for patients with congenital heart disease, acquired valvular disease, and coronary artery disease. Students will also learn when it is appropriate to initiate referral to a cardiovascular surgeon.

MSUR 877 Cardiovascular Thoracic Surgery (CVT) Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.
MSUR 878 Thoracic Surgery (1.5-12 QH)
The purpose of this course is to provide students with exposure to the evaluation and care of patients with general thoracic surgical disease.

MSUR 879 Thoracic Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 880 Surgery Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a surgical sub-specialty. Students will gain familiarity with the diagnostic techniques used in the field and learn when it is appropriate to initiate a referral to a specialist.

MSUR 881 Surgery Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 884 Transplant Surgery (1.5-12 QH)
The purpose of this course is to provide students with an overview of transplantation, transplant immunology, and organ donation.

MSUR 885 Transplant Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 888 Surgery (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of surgery in a virtual or other non-clinical setting.

MSUR 889 Surgery Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 892 Oral Maxillofacial Surgery (1.5-12 QH)
This course provides students with an introduction to oral maxillofacial surgery.

MSUR 893 Oral Maxillofacial Surgery Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MSUR 898 Surgery Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of surgery for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

MURO 802 Urology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in urological diseases and to become familiar with diagnostic and procedural...
techniques used in this specialty. Students will also learn when it is appropriate to initiate a referral to a urological specialist.

MURO 803 Urology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MURO 820 Pediatric Urology (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in pediatric urology. Students will gain familiarity with the diagnostic techniques used in this specialty. Students will also learn when it is appropriate to initiate a referral to a pediatric urologist.

MURO 821 Pediatric Urology Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MURO 880 Urology Sub-Specialty (1.5-12 QH)
The purpose of this course is to prepare students to recognize and treat commonly encountered problems in a sub-specialty of urology, such as urologic oncology or reconstructive surgery.

MURO 881 Urology Sub-Specialty Extramural (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MURO 888 Urology (Non-Clinical) (1.5-12 QH)
This course provides students the opportunity to explore the specialty of urology in a virtual or other non-clinical setting.

MURO 889 Urology Extramural (Non-Clinical) (1.5-12 QH)
Extramural electives offer students the opportunity to gain training and experience at another medical school or healthcare organization. Learning activities and assessment methods are specified by the host institution.

MURO 898 Urology Enrichment Elective (1.5-12 QH)
This course provides students the opportunity to explore the specialty of urology for educational enrichment once they have reached the maximum allowable credit that can be applied toward degree requirements.

NDNP 725 Advanced Health Assessment (4 QH)
Advanced physical assessment builds upon the basic assessment techniques learned at the undergraduate level in order to prepare the student to perform a comprehensive history and physical exam. Instruction is also provided in critical thinking and differential diagnosis. This course utilizes weekly classroom instruction, classroom case study application and physical exam lab practicum. Students are required to satisfactorily complete a comprehensive, standardized preoperative physical exam demonstration at the culmination of the course.
NDNP 752 Advanced Physiology and Pathophysiology I (5 QH)
In this course, students receive the foundational requisites in organ specific physiology and pathophysiology. Course instruction begins at the cellular level, including the genetic basis of disease, and advances to include a review of various organ systems’ functions and disease states.

NDNP 753 Advanced Pharmacology I (3 QH)
With content integrated with that of NDNP 752, this course provides a comprehensive review of the pharmacology agents commonly used to treat human disease.

NDNP 754 Advanced Physiology and Pathophysiology II (5 QH)
In this course, students receive the foundational requisites in organ specific physiology and pathophysiology. Course instruction begins at the cellular level, including the genetic basis of disease, and advances to include a review of various organ systems’ functions and disease states.

NDNP 755 Advanced Pharmacology II (3 QH)
With content integrated with that of NDNP 754, this course provides a comprehensive review of the pharmacology agents used to treat human disease.

NDNP 901 Translational Research I (3 QH)
This course focuses on the methodological basis for translational research, for the purpose of improving the efficiency and effectiveness of clinicians in diverse practice settings through clinical evaluation, synthesis, transference, and application of appropriate evidence-based findings. This course provides an overview of frequently used descriptive and inferential biostatistical methods as well as the introduction to translational research evaluation. The course includes application of the theories of measurement, statistical inference and decision trees, contributing to better clinical decisions and improved patient care outcomes. Students will learn to critically appraise primary research as an important step in evidence translation. This course will train students to understand and evaluate diverse quantitative and qualitative research designs while developing analysis strategies to determine research strength and applicability. Emphasis will be placed on evaluating design, methodology, and statistical inference measures to grade and understand healthcare research.

NDNP 902 Translational Research II (3 QH)
Building upon the content provided in NDNP 901, this course is designed to develop student knowledge and skills regarding the evaluation, translation and integration of published research results into clinical practice. Students will learn how to: (1) conceptually frame clinical practice problems; (2) transform these identified problems into answerable research questions; (3) search for the best clinical evidence; (4) assess the clinical evidence utilizing scientific, biostatistical and epidemiologic principles; and (5) integrate the research results in a culturally competent manner. Knowledge and skills regarding the critical appraisal and synthesis of research will foster the student’s understanding of models used for evidence-based practice.

NDNP 904 Entry-Level Doctoral Project Planning I (2 QH)
This introductory course focuses on the beginning planning stages of undertaking a doctoral project. Guided by course faculty, students will develop a research question, or problem statement, that demonstrates significance in the field of interest. Students will determine which project type best suits their research focus: E-portfolio, faculty supervised research, or a Joanna Briggs Institute (JBI) Systematic Review. Students will search the literature for evidence to support the project and develop a Doctoral Project Prospectus. A thorough literature review will be required to demonstrate feasibility of the project.
NDNP 905 Entry-Level Doctoral Project Planning II (2 QH)
A continuation of NDNP 904, students will undertake key activities to complete a comprehensive Doctoral Project Proposal. Depending on the project type (E-portfolio, faculty supervised research, or Joanna Briggs Institute Systematic Review) students will complete a needs assessment, SWOT analysis, identify a model to support evidence translation, identify necessary resources, plan for change management, and determine methods for project evaluation. Students will be assigned a doctoral project advisor during this quarter, and will be expected to create a shared drive for ongoing collaboration on their project. Students will begin the institutional and university IRB processes, if necessary.

NDNP 910 Health Policy, Economics and Finance (3 QH)
The content in this course will equip the student with the knowledge and skills needed to evaluate how public policy-making strategies impact the financing and delivery of healthcare services. The student will learn to apply methods of policy analysis to policies of relevance to their practice setting, and to use the results to advocate for policy change. Content includes the knowledge and skills needed for students to analyze business practices encountered in the healthcare delivery setting. Theory and application are integrated throughout the course, particularly related to development of cost/benefit analysis and the long-term financial impact of practice changes.

NDNP 911 Professional Dissemination Skills (2 QH)
This course is designed to provide content necessary for professional presentation and scholarly dissemination of knowledge. Students will demonstrate the ability to inform the public of the role and practice of the doctoral-prepared nurses and represent themselves in accordance with the relevant code of ethics for their profession.

NDNP 912 Leadership, Quality/Safety and Outcomes Management (3 QH)
Leadership theories and principles are analyzed and applied to the management of complex leadership situations in healthcare. Students will participate in assessing and improving the effectiveness of their leadership style and emotional intelligence. This course explores the theoretical basis of human error, patient safety and quality improvement activities in patient care. It introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, interprofessional practice, and evidence-based quality improvement management models. An emphasis is placed on acquiring and demonstrating the skills needed to utilize data for ethical healthcare decision-making through the process of outcomes management. Course content will also include integration of informatics to support culturally responsive, evidence-based practice at a leadership level.

NDNP 921 Entry-Level Doctoral Immersion Residency I (3 QH)
This course series (NDNP 921-922-923) focuses on specific aspects of the implementation of an evidence-based doctoral project. Guided by faculty and their Doctoral Project Advisor, students undertake key activities outlined in their project proposal. Activities may include (depending on project type): a systematic literature review, data collection, and stakeholder engagement. The student will complete the requirements of this course series within the domain of patient care, leadership/management, education or health care/public policy advocacy. Students will also continue to populate their portfolio with work demonstrating attainment of clinical residency goals such as reflective writing assignments, self-evaluations, and clinical evaluation documentation from preceptors.
NDNP 922 Entry-Level Doctoral Immersion Residency II (3 QH)
A continuation of NDNP 921, students will proceed with implementation of their doctoral project proposal. Activities may include (depending on project type): development of a data matrix or evidence table, contextual implementation steps, and ongoing data collection. Students will also continue to populate their portfolio with work demonstrating attainment of clinical residency goals such as reflective writing assignments, self-evaluations, and clinical evaluation documentation from preceptors.

NDNP 923 Entry Level Doctoral Immersion Residency III (4 QH)
A continuation of NDNP 922, students will complete the implementation of their doctoral project and begin writing their final manuscript. Activities include finalizing implementation steps at the local level and synthesis of evidence into a draft of a manuscript. Students will also continue to populate their doctoral portfolio with work demonstrating attainment of clinical residency goals such as reflective writing assignments, self-evaluations, and clinical evaluation documentation from preceptors.

NDNP 931 Entry-Level Doctoral Project I (3 QH)
The doctoral program culminates with the completion of a scholarly work that demonstrates the ability to critically evaluate research and translate findings into practice. This is an opportunity for the student to prepare a substantial final written work product that reflects the breadth of skills and knowledge the student has gained throughout the program of study. The Doctoral Project Guide for Entry-Level DNP students provides information regarding the project, as well as key deadlines associated with each project item.

NDNP 932 Entry-Level Doctoral Project II (3 QH)
A continuation of NDNP 931, this course builds upon the final doctoral manuscript by guiding the student through dissemination of their findings. Dissemination of the results of the doctoral project will be accomplished through submission for professional publication, presentation at an industry meeting, or poster session presentation at a University event. In addition to the final work product, students will complete the remaining requirements of their portfolio of work, which demonstrates competency in all areas of didactic preparation, clinical training, and doctoral scholarship. The Doctoral Project Guide for Entry-Level DNP students provides information regarding the project requirements, as well as key deadlines associated with each project item.

NDNX 529A & B same as HIPS 515A & B

NPMH 711 Clinical Correlations I (1 QH)
The content of this simulation course is integrated with the topics being presented in NPMH 776 Foundations in Assessment of Psychiatric Mental Health and NPMH 777 Psychopharmacology I for the PMHNP. This course provides initial clinical correlation with didactic content, along with an introduction to clinical scenarios using standardized patients. Students will demonstrate the knowledge and skills needed to perform and document a comprehensive diagnostic assessment, initiate and interpret relevant diagnostic tests and procedures, and evaluate the pharmacodynamic effects of psychopharmacology therapies.

NPMH 712 Clinical Correlations II (1 QH)
The content of this simulation course is integrated with the topics being presented in NPMH 779 Foundations in the Diagnosis of Neuropsychiatric Disorders, NPMH 780 Psychopharmacology II for the PMHNP, and NPMH 781 Psychotherapy II: Use of Psychotherapies for Treatment of
Disorders. Students will demonstrate the clinical reasoning steps that underpin the development of differential diagnosis and apply DSM V and IDC-10 psychiatric and mental health conditions when developing diagnoses. In addition, students will continue to advance assessment and psychopharmacology knowledge and skills.

**NPMH 775 Neuro Anatomy and Physiology (4 QH)**
This course will cover fundamental issues of neuroanatomy, neurophysiology and neurochemistry of brain systems and an overview of basic brain-behavior principles as they apply to current models of cognitive processes.

**NPMH 776 Foundations in Assessment of Psychiatric Mental Health (4 QH)**
Use of psychological tests in the evaluation of the relationship between brain and behavior across the life span. The goal of this course is to acquaint students with modern neuropsychological approaches to normal and abnormal behavior along with methods of assessing the neurological basis of behavioral problems.

**NPMH 777 Psychopharmacology I for the PMHNP (2 QH)**
This course focuses on categories of medications specific to individuals with psychiatric illness and mental disorders. This didactic course will cover the principles and practice of psychopharmacotherapy of the major psychiatric disorders. Topics covered include pharmacokinetics, pharmacodynamics, and mechanisms of action of the commonly used drugs in neuropsychiatry. The psychopharmacologic treatments of mood disorders, psychotic disorders, anxiety disorders, substance-related disorders, neurodevelopmental disorders and personality disorders will be emphasized. Also covered are drug treatments in the elderly, during pregnancy, and in the medically ill.

**NPMH 778 Psychotherapy I: A Review of Psychotherapies (3 QH)**
This course provides a comprehensive review of the major systems of psychotherapy. The implications of psychotherapy systems for case formulation and the similarities and differences between different psychotherapy systems are reviewed. The course places special emphasis on the key assumptions of various applied theories, the role and basic methods of clinical assessment, the stages of therapy, the role of the therapeutic relationship, and the goals and strategies to effect change. Units on gender-sensitive psychotherapy and culture-sensitive psychotherapy are included. Research bearing on and based on these systems is considered.

**NPMH 779 Foundations in the Diagnosis of Neuropsychiatric Disorders (5 QH)**
This course presents an in-depth analysis of the DSM-V and ICD-10 diagnostic criteria for major categories of psychopathology. The concepts of mental illness in general, as well as specific categories of mental illness such as schizophrenia, affective disorders, anxiety disorders, organic brain disease and personality disorders are covered. This course also introduces the concept of the role of mental status and behavioral observations as part of the diagnostic formulation.

**NPMH 780 Psychopharmacology II for the PMHNP (2 QH)**
This course builds on NPMH 777 and challenges students’ critical thinking and problem solving skills as they apply psychopharmacologic principles to a wide array of chronic and acute clinical conditions. Students will learn to synthesize information as it relates to psychopharmacological treatment of disease components across the life span.
NPMH 781 Psychotherapy II: Use of Psychotherapies for Treatment of Disorders (2 QH)
This course will emphasize the use of empirically supported therapeutic methodologies to facilitate behavior change for a variety of clinical problems in children, adolescents, and adults. The application of different learning principles and specific techniques of therapeutic change will be covered including parent-training interventions. The student will learn to solve problems encountered in practical application of cognitive and behavioral techniques. Emphasis will be placed on methods and procedures effective in the elimination of inappropriate behaviors and the acquisition and maintenance of appropriate behaviors.

NPMH 782 Assessment, Diagnosis, Management of Child and Adolescent Mental Health (4 QH)
This course is designed to enhance capabilities to assess, diagnose and manage behavioral and mental health disorders seen in children and adolescents. Key components of the course include behavioral and mental health screening, appropriate use of valid and reliable screening tools, assessment and diagnosis formulation consistent with the current edition of the Diagnostics and Statistics Manual, and evidence-based treatment and management. Collaboration with members of the pediatric healthcare team, and care coordination and specialist referral strategies will be incorporated into the study of each disorder.

NPMH 783 Assessment, Diagnosis, Management of Addictive Disorders (3 QH)
This course will enhance the student’s understanding of addiction disorders. By weaving elements of basic science, assessment, and diagnosis, students will learn to manage addiction disorders using integrated knowledge to propose evidenced based approaches. Special attention will focus on co-occurring disease process and disorders across the lifespan.

NPMH 784 Delivering Community Mental Health Services to the Vulnerable and Underserved (3 QH)
This course provides students an opportunity to explore community-based psychiatric/mental health nursing care strategies within the context of serving vulnerable and underserved populations in the United States. Particular attention will be paid to exploring social influencers of health, community mental health assessment strategies, common barriers to effective healthcare, and risk stratification. Emphasis will also be placed on the constructions, meaning, and experiences of difference in an effort to prepare students to function as culturally responsive and ethical PMHNPs.

NPMH 810 Clinical Residency I (9 QH)
This clinical residency is the first of five applied professional experiences in the advanced-practice of psychiatric mental health nursing across the life span. In this course, the student will engage in activities to develop competency in the comprehensive assessment of acute and chronic mental health conditions, in various settings, at program approved sites. Students will apply the knowledge and skills needed to perform and document a comprehensive diagnostic assessment, initiate and interpret relevant diagnostic tests and procedures, and evaluate the pharmacodynamic effects of psychopharmacology therapies. This course also includes a seminar component (20 classroom hours) during which time the student presents case material from their clinical experiences using a clinical case presentation model, and participates in board prep activities.
NPMH 820 Clinical Residency II (9 QH)
This clinical residency is the second of five applied professional experiences in the advanced-practice of psychiatric mental health nursing across the life span. In this course, the student will engage in activities to further refine assessment skills and to develop competency in the diagnostic reasoning process, at program approved sites. Students will demonstrate the clinical reasoning steps that underpin the development of differential diagnosis and apply DSM V and IDC-10 psychiatric and mental health conditions when developing diagnoses. In addition, students will continue to advance assessment and psychopharmacology knowledge and skills. This course also includes a seminar component (20 classroom hours) during which time the student presents case material from their clinical experiences using a clinical case presentation model, and participates in board prep activities.

NPMH 830 Clinical Residency III (9 QH)
This clinical residency is the third of five applied professional experiences in the advanced-practice of psychiatric mental health nursing across the life span. In this course, the student will engage in activities to develop competency in the development and implementation of patient-centered treatment goals and plans, at approved clinical sites. Cognitive behavioral therapies, therapeutic relationships and counseling, and evidence based therapy techniques receive particular emphasis. Management of common psychiatric disorders via clinical practice guidelines is a third treatment thread. In addition, students will continue to advance and demonstrate assessment and diagnostic reasoning knowledge and skills, and appropriate use and management of psychopharmacology treatment. This course also includes a seminar component (20 classroom hours) during which time the student presents case material from their clinical experiences using a clinical case presentation model, and participates in board prep activities.

NPMH 840 Clinical Residency IV (9 QH)
This clinical residency is the fourth of five applied professional experiences in the advanced-practice of psychiatric mental health nursing across the life span. In this course, the student will engage in activities that further develop competencies in all aspects of the standards of practice of the psychiatric mental health nurse practitioner, at approved clinical sites. Additional emphasis will be placed on activities related to care coordination and collaboration, health teaching and group therapies, consultation, leadership, resource utilization, and evaluation of professional practice. This course also includes a simulation component (20 classroom hours) during which time students undergo evaluation of their progress toward demonstration of entry-level competency in assessment, diagnosis, outcome identification, and the therapeutic planning and implementation of psychiatric mental health nursing practice.

NPMH 850 Clinical Residency V (9 QH)
This clinical residency is the fifth of five applied professional experiences in the advanced-practice of psychiatric mental health nursing across the life span. In this course, the student will engage in activities that demonstrate achievement of the full-spectrum of entry-level clinical practice outcomes, at approved clinical sites. This course also includes a seminar component (20 classroom hours) during which time the student presents case material from their clinical experiences using a clinical case presentation model, and demonstrates readiness to sit for the board exam.

NPMH 914 Ethics and Legal Realities of Practice (2 QH)
This course reviews psychiatric mental health scope of practice standards, local, state, and federal policies and regulations that govern practice, and the American Nurses Association’s 
Code of Ethics for Nurses with Interpretive Statements. Ways to identify and resolve ethical and legal dilemmas encountered by the PMHNP and topics such as consumer autonomy, dignity, and rights, the application of ethical principles in professional practice, and advocacy to improve access and parity of mental health services are discussed.

PACE 801 Stroger Hospital (Cook County) Core Podiatry Clerkship (8 QH)
The Stroger Hospital Core Podiatry Clerkship is a required four- to five-week clinical experience that combines pediatric, adult, and geriatric podiatric medical/orthopedic/surgical, ambulatory and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. The structure of the total experience allows the student, over multiple clerkships, to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty.

PACE 802 James A. Lovell Federal Health Care Center Core Podiatry Clerkship (8 QH)
The James A. Lovell FHCC Core Podiatry Clerkship is a required clinical experience of four- to five-week duration. The clerkship is one of the multiple-site comprehensive clinical experiences that combine pediatric, adult and geriatric podiatric medical/orthopedic/surgical, ambulatory (including office) and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. The structure of the total experience allows the student, over multiple clerkships, to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty.

PACE 803 Jesse Brown VA Core Podiatry Clerkship (8 QH)
The Jesse Brown VA Clerkship is a required clinical experience of four- to five-week duration. The Podiatric Clerkship is one of the multiple-site comprehensive clinical experiences that combine pediatric, adult and geriatric podiatric medical/orthopedic/surgical, ambulatory (including office) and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. The structure of the total experience allows the student, over multiple weeks, to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty.

PACE 804 Hines VA Core Podiatry Clerkship (8 QH)
The Hines VA Clerkship is a required clinical experience of four- to five-week duration. The Podiatric Clerkship is one of the multiple-site comprehensive clinical experiences that combine pediatric, adult and geriatric podiatric medical/orthopedic/surgical, ambulatory (including office) and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. The structure of the total experience allows the student, over multiple weeks, to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty.

PACE 806 Scholl College of Podiatric Medicine Clerkship (2 QH)
The SCPM Clerkship includes participation in several required activities that are performed virtually or in-person. As part of this experience, the student will be assigned to board review lectures and mock interviews.

PAPB 501 Understanding and Implementing Clinical Research (2 QH)
This course is designed to impart and develop skills in critical review of the literature for enhancing lifelong learning. To this end, the course will encompass research design, commonly used statistical analysis techniques in medicine, evidence-based medicine (EBM) and medical
writing. A small-group participatory journal club format will also be used to drive home key concepts.

**PAPB 502A & B Biomechanics (6 QH)**
This course is designed to provide a comprehensive, in-depth foundation for the understanding of biomechanics, locomotion and function. The normal structure and function of the lower extremity will be analyzed in detail and compared to symptoms and pathological conditions arising from deviations of normal structure and function. Although the material is presented in a lecture setting, considerable emphasis will be placed on self-study through the use of learning assignments.

**PAPB 604 Orthotic Laboratory Workshop (0.5 QH)**
Students will spend four, three and a half-hour sessions in the orthotic lab to learn about accommodative orthoses, grinding techniques, orthotic materials and hands-on shoe fitting.

**PAPB 605 Sports Medicine (3 QH)**
This course is designed to provide an introductory understanding of Sports Medicine. Focus will be on evaluation of the athlete as well as common sports medicine pathology. Although the material will be presented in a lecture setting, considerable emphasis will be placed on self-study through the use of reading assignments and audiovisual materials.

**PAPB 606A, B & C Pediatric Orthopedics (4 QH)**
Pediatric Orthopedics is a required course offered in the second year. This course is designed to integrate the biomechanics and orthopedic knowledge problem-solving techniques learned in the core courses to a more advanced setting.

**PAPB 705 Podiatric Orthopedics Capstone Clinical Experience – Workshop (6 QH)**
This capstone workshop experience is composed of six weeks of hands-on biomechanics examinations, pediatric and orthopedic clinical cases utilizing problem-based learning, workshops to practice strapping and padding, casting and physio taping techniques, computer and visual gait analysis, orthoses prescribing and manufacturing, shoe gear modification, rehabilitative medicine modalities, athletic bracing, gait assistive devices and gait abnormalities.

**PAPB 801 Applied Biomechanics Elective Clerkship (8 QH)**
This is a four- to five-week elective clerkship offered in February, March or April of the fourth year that offers the student additional experience with various aspects of applied biomechanics obtained in clinical, research and laboratory components. The student will participate in the following: adult and pediatric patient care, a research project with the gait lab, the orthotic lab on campus as well as visit off-site orthotic and prosthetic locations, offsite physical therapy rotations, an off-site wound care clinic, EMG/NCV studies at an off-site location and participate in the care of sports medicine patients at off-site locations.

**PAPB 802 Research Elective Clerkship (8 QH)**
This is a four- to five-week clerkship that offers the student additional experience with various aspects of research.

**PBBS 500A & B Clinical Anatomy (9 QH)**
Clinical Anatomy is a comprehensive series of lectures on the gross structure and function of the human body. The lectures are complemented by a clinical correlation lecture and a medical imaging lecture in each major region. The course includes complete dissections of human cadavers in the laboratory.
PBBS 503A & B Structure and Function (11 QH)
This 11 credit-hour lecture and laboratory course presents the principles of medical histology and physiology. Normal organ systems will be examined at the ultrastructural, microscopic and whole-organ levels. The course is an important prerequisite for Pathology, Pharmacology and Medicine.

PBBS 504 Neuroscience (5 QH)
Neuroscience is a comprehensive series of lectures on the structure, neurophysiology, function and neurological disorders of the human nervous system. The lectures are complemented by PowerPoint presentations, laboratory demonstrations, and clinical correlations.

PBBS 505A, B & C Microbiology and Immunology (7 QH)
Microbiology and Immunology is a comprehensive series of lectures, case studies and small-group exercises on fundamental microbiological and immunological principles emphasizing their applications to podiatric medicine. Chemical, physical and biological properties of microorganisms are used to explain how microorganisms cause disease, and how the human host defenses combat disease-causing agents. Case studies are presented throughout the course. Symptoms of infectious diseases and immunologic disorders are emphasized.

PBBS 506A & B Lower Extremity Anatomy (8 QH)
Lower Extremity Anatomy is a comprehensive lecture and laboratory series covering the gross anatomy of the lower extremity. PowerPoint presentations, demonstrations and clinical correlations are presented in lectures to enhance the students’ knowledge of this region of human anatomy. The laboratory provides a complete regional dissection of the gluteal, thigh, popliteal, leg, and foot regions of the lower extremity.

PBBS 508A & B Biochemistry and Genetics (5 QH)
This course provides a comprehensive series of lectures on medical biochemistry and genetics, presenting the physiochemical aspects in the human being. The biosynthesis and energy yielding transformations of biomolecules (proteins, nucleic acids, lipids, carbohydrates, and small-molecular weight compounds) will be detailed and their relationship to health will be illustrated through clinical correlations. In addition, this course will present the major cellular and molecular mechanisms that underlie the transmission of genetic information and provide the molecular foundation for understanding diagnostic and treatment modalities.

PBBS 601A & B Pharmacology (8.5 QH)
This course is a comprehensive presentation of medical pharmacology. The general principles of drug disposition including drug absorption, distribution, metabolism, elimination and pharmacokinetics are covered, as well as the pharmacodynamics of major drug groups. Emphasis is on the mechanism of drug action, uses, adverse effects, contraindications and clinically important drug interactions. Dosage is not emphasized unless specifically stated by the instructor.

PBBS 602A, B & C Pathology (10.5 QH)
A comprehensive lecture series covering the fundamental concepts of general and organ pathology. General pathology is concerned with abnormal cellular phenomena, reactions to injury, and pathologic mechanisms. Specific diseases and their pathologic consequences are considered in organ system pathology. Numerous case studies are interposed throughout the course. These presentations illustrate diverse pathology, integrate basic science concepts with clinical presentations, and introduce patient management concepts.
PDPM 600 Basic Biomedical Science Comprehensive Examination (2 QH)
This course is composed of a comprehensive examination covering all Basic Biomedical Science courses and mandatory review sessions. The examination is intended to assess student progress in their Basic Biomedical Science courses over the first two years. The examination also provides feedback to the students regarding their board preparedness and is used along with the review sessions to help prepare students for the American Podiatric Medical Licensing Examination (APMLE) Part I.

PDPM 800 Clinical Competency Exam (1 QH)
The Clinical Competency Exam (CCE) is an internal benchmark of students’ clinical skills and knowledge to assess clinical competency before graduating from the college. Passing the CCE is a graduation requirement. The exam consists of two parts. The first part is a comprehensive standardized, patient-based performance exam that is offered in the third year before students begin clerkship rotation and before students take the national clinical skills exam. The second part is a comprehensive written exam that covers clinically oriented knowledge domain. This exam is given to fourth-year students before taking a national written exam.

PELE 700 Elective and Core Podiatry Clerkship (8 QH)
The Elective and Affiliated Podiatric Clerkships are four to five weeks each, multiple site, comprehensive clinical experiences that combine pediatric, adult and geriatric podiatric medical/orthopedic/surgical, ambulatory (including office) and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. The structure of the total experience allows the student, over multiple clerkships, to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty. The experiences include a total of four core podiatry clerkships and seven required elective clerkships with one optional additional elective clerkship.

PELE 800 Elective and Core Podiatry Clerkship (8 QH)
The Elective and Affiliated Podiatric Clerkships are four to five weeks each, multiple site, comprehensive clinical experiences that combine pediatric, adult and geriatric podiatric medical/orthopedic/surgical, ambulatory (including office) and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. The structure of the total experience allows the student, over multiple clerkships, to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty. The experiences include a total of four core podiatry clerkships and seven required elective clerkships with one optional additional elective clerkship.

PELE 888 Optional Elective Podiatry Clerkship (8 QH)
This optional Elective Podiatric Clerkship is a four to five weeks comprehensive clinical experience that combines pediatric, adult and geriatric podiatric medical/orthopedic/surgical, ambulatory (including office) and inpatient experiences in the diagnosis and management of patients with diverse pathology of the foot and ankle. This elective is not a requirement for graduation but allows the student to cumulatively increase and enhance their clinical skills under supervision of the clinical site faculty with an additional clerkship in lieu of a vacation month.

PMED 502A & B Podiatric Medicine and Surgery (3.5 QH)
The Podiatric Medicine and Surgery course is presented in the first year. This course encompasses many aspects of clinical podiatric medicine and will serve as a foundation to enhance the understanding of the basic science and future clinical courses. Starting with an
introduction to Medical Ethics, it will provide the student with knowledge of the scope of podiatry including Podiatric Medicine, Podiatric Surgery, Biomechanics and Podiatric Radiology.

**PMED 503 Podiatric Clinical Skills and Reasoning I (2 QH)**
This introductory clinical course is a combination of didactic lectures, hands-on workshops and clinical experience. This course is designed to enhance and reinforce the didactic material presented in PMED 502A & B Podiatric Medicine and Surgery.

**PMED 603 Dermatology (2.5 QH)**
This course in skin diseases is comprised of the study of the anatomy and physiology of the skin and its appendages, general etiology of skin diseases, general symptoms and classifications of skin diseases and their treatment. The diagnosis and treatment of the major dermatological conditions common to podiatry are presented through the use of visuals and case presentations.

**PMED 605A, B & C Podiatric Clinical Skills and Reasoning II – Workshop (4 QH)**
This workshop is designed to provide the second-year podiatric student with skills and cognitive ability to function in the advanced clinical experiences. During the second year, the student will begin to develop proficiency in obtaining a podiatric history, performing a podiatric physical examination, performing palliative care and applying padding and taping to the foot and ankle.

**PMED 606A, B & C Podiatric Clinical Skills and Reasoning II – Clinic (4 QH)**
The clinic rotation is designed to develop and enhance manual skills required for palliative care, increase students’ confidence and competence with patient interaction and to provide experience in performing history and physical exams. The Community Service Podiatry Clinical Experience component of this course is a comprehensive outpatient/ambulatory clinical experience. The broad nature of the clinical experience allows the student to enhance skills and knowledge in the areas of podiatric medicine, podiatric orthopedics and podiatric surgery. The podiatric clinical experience builds upon previous clinical experiences. All student activities are under the supervision of the clinical faculty.

**PMED 608 A, B & C Medicine (8 QH)**
This course is devoted to the pathophysiology, signs and symptoms, diagnosis and treatment of commonly encountered medical illnesses. Special emphasis is placed on systemic disorders affecting the lower extremity. A balanced view of the range of problems encountered by the primary care physician is discussed, allowing the student to recognize and be well informed about major medical problems outside of podiatric medicine, so that appropriate referrals can be made.

**PMED 702A & B Peripheral Vascular Diseases (1.5 QH)**
This course investigates the structure and dynamics of the peripheral vascular system, arterial and venous, general pathological considerations, non-invasive vascular testing and special methods of investigations performed in the office or the hospital. The complications of peripheral vascular diseases are included. The student is expected to gain appropriate knowledge to recognize early signs, symptoms and complications of peripheral vascular disorders and to determine whether a disorder is local or general, becoming skilled in providing appropriate podiatric care.
PMED 707 Podiatric Medicine Capstone Clinical Experience – Workshop (8.5 QH)
This Capstone Clinical Workshop Experience is a continuation of the experiences provided in the second year. The additional experiences allow the student to develop proficiency in all aspects of podiatric care, evaluation and treatment of patients as well as further development of critical thinking skills. The cognitive aspect of the experience is heavily focused on problem-based learning designed to incorporate knowledge of basic and clinical sciences for learning diagnostic and treatment skills. The experience encompasses aspects of diagnosis and management of patients with diverse pathology. The student is expected to efficiently employ evaluative and management skills.

PMED 708A, B & C Podiatric Clinical Skills and Reasoning III – Clinic (7 QH)
The P3 clinic rotation builds upon the P2 clinic rotation experience and is designed to further enhance the students’ skill sets in palliative care, performing history and physical examinations and formulating appropriate differential diagnoses and treatment plans.

PMED 709A, B & C Community Health, Ethics and Professional Responsibility (3 QH)
In today’s world many principles of everyday law, as well as sound business management, are entwined in a medical practice. The physician of today should be versed in the practical aspects of business and be aware of the legal responsibility he/she has to patients. This course will present the fundamental aspects of law, business and public health in a setting of medical practice.

PMED 801 Internal Medicine Clerkship (8 QH)
This clinical rotation in internal or family medicine is a four- to five-week, hands-on required clerkship that introduces the student to all aspects of inpatient hospital care utilizing patient rounds, with bedside teaching, observing special studies, performing histories and physicals, working in the emergency department and monitoring patient progress. To enhance patient care and student experience, on-call duty may be a part of the student’s responsibilities.

PMED 802 Emergency Medicine Clerkship (8 QH)
The Emergency Medicine Clinical Experience is a four- to five-week clinical experience that will introduce the podiatric medical student to hospital based emergency medicine. The student will have emergency room patient encounters on a daily basis. The intent of the Emergency Medicine Clinical Experience is to have a well-rounded experience of typical ER pathology, avoiding an isolated focus on the foot/ankle. This clinical experience is designed to provide the podiatric medical student with the knowledge, skills, and values that a contemporary podiatric physician should possess; to develop abilities necessary to immediately manage medical/surgical emergent situations until emergency medical care is available; and to introduce the student to the diagnosis and emergent treatment of foot and ankle injuries. While in the emergency department, the student will work with and be under the supervision of the attending emergency physician, emergency medical resident, or the attending physician, as assigned.

PODX 529A & B same as HIPS 515A & B
PODX 564A, B & C same as MCUR 502A, B & C
PODX 665D, E & F same as MCUR 602D, E & F
PRAD 602A, B & C Podiatric Radiology (6 QH)
This course consists of didactic lectures and clinical presentations. Material presented in this course pertains to radiographic anatomy, cardinal radiographic features of disease and orthopedic
radiology typically encountered in clinical practice. Because the majority of podiatric physicians will expose, process and interpret their own X-ray images, it is extremely important that each student understand the basics of X-ray production, radiographic quality and radiation safety for the patient and operator. Emphasis is placed on understanding and evaluating normal radiographic anatomy, alterations in bone density, arthropathies and both bone and soft tissue tumors. Descriptions and visual presentations of these and other pathological processes are presented in class. Presentations demonstrate both the normal and abnormal. Case studies emphasizing the lecture material will be presented at intervals throughout the course. Though the lower extremity is emphasized, the course may use radiographs of other anatomic regions which may best illustrate a particular pathology.

**PRAD 702 Podiatric Radiology Capstone Clinical Experience – Workshop (9 QH)**
This clinical experience/workshop is a six-week program actively utilizing and building upon the knowledge obtained in PRAD 602A, B & C Podiatric Radiology, through the use of clinical exercises in diagnostic radiology. Students will gain hands-on experience in radiographic safety, positioning and processing with emphasis on digital imaging. The student will gain practical experience in the interpretation and evaluation of radiographs, both normal and pathological. Normal radiographic anatomy and normal variants encountered in the lower extremity as well as the radiographic appearance of soft tissue and osseous pathology are also emphasized. Practical clinical radiography is also reviewed. This clinical experience will utilize case presentations, lectures and workshop formats. Read out loud sessions will also be scheduled at regular intervals with faculty in various modalities such as plain and digital radiographs, magnetic resonance imaging, computed tomography and ultrasound. A variety of instructional media are employed including the internet and computer CDs. The student will be allowed ample time for independent study and will be expected to make beneficial use of that time either on-site or remotely. It is anticipated that the student will require minimal supervision and formal scheduling. In addition, a hospital-based radiology experience may be provided to allow first-hand knowledge of advanced imaging modalities and assist in further sharpening the interpretive skills of the student in these techniques and environment.

**PSUR 602A, B & C General Surgical Principles and Anesthesiology (10 QH)**
This comprehensive surgery course provides the student with the basic concepts and principles of surgery, wound healing, surgical problems/complications, and emphasis is also placed upon the fundamentals of podiatric surgery. In addition to the surgery component, local, regional and general anesthesia relevant to the practice of contemporary foot and ankle surgery is covered. Complications of anesthesia and drug interactions are emphasized. This course has a workshop portion which presents the student with a general understanding of the basic principles of operating room procedures and protocol, and will allow the student to be able to function in a safe, efficient manner in the operating room environment. This portion of the clinical experience makes the student knowledgeable and skilled in the activities of a non-sterile person in the operating room, the knowledge of surgical equipment and the proper skills in the handling and use of this equipment. Also the skills needed in activities dealing with assisting in surgery. This course is a prerequisite for the Podiatric Surgery Capstone.

**PSUR 704 Podiatric Surgery Capstone Clinical Experience – Workshop (5.5 QH)**
This course completes the student’s introduction to the subject at a didactic level, and is supplemented with workshops that demonstrate the theories and concepts presented during PSUR 602 lectures. It represents the “Capstone” experience in surgery before clerkships begin.
This course builds on the general principles presented in PSUR 602 General Surgical Principles and Anesthesiology; it exposes the students to the subject of podiatric surgery, and presents common operative techniques employed in the treatment and correction of foot and ankle deformities. A concurrent workshop experience will afford the student the opportunity to see some of the techniques discussed in lecture and workshops.

**PSUR 706A & B Lower Extremity Traumatology (2 QH)**
This comprehensive Lower Extremity Traumatology course of lectures provides the student with the basic concepts and principles of traumatology, including surgical problems/complications and emphasis is also placed upon the fundamentals of trauma evaluation and treatment. Lectures are augmented with audiovisual aids. In addition to the surgery component, this course also provides the student with the basics of patient evaluation, radiology, medicine and biomechanics as it pertains to trauma. Complications of trauma care are emphasized.

**PSUR 802 General Surgery Clerkship (8 QH)**
The General Surgery Clerkship is a four- or five-week clinical experience that will introduce the podiatric medical student to hospital-based general surgery. The student will have pre-operative, intra-operative, and/or post-operative patient encounters on a daily basis. The intent of the General Surgery Clerkship is to provide the podiatric medical student with the basic concepts of general surgery, thus broadening the student's understanding of the principles of surgery. While participating in the General Surgery Clerkship, the student will work with, and be under the direct supervision of the attending surgeon or resident, as assigned.

**YELP 700 Deconstructing Landmark Clinical Trials (2 QH)**
This course will introduce students to a wide variety of controversial landmark clinical trials that have significantly impacted the practice of medicine. In addition to identifying pivotal trials that have shaped treatment guidelines for a variety of diseases, students will learn to deconstruct the trial design, results and conclusions to become appropriately skeptical, critical-thinking pharmacists. Each week, students will be required to read one or more pivotal clinical trials prior to class and be prepared for a weekly quiz over the required reading. Class time will primarily be devoted to discussion-based learning regarding the trial methodology, analysis and impact on clinical practice.

**YELP 701 Critical Care and Medical Emergencies (2 QH)**
This course will introduce students to a wide variety of topics related to critical care and acute medical emergencies. Topics and content will focus on drug therapy and the role of the pharmacist within an interprofessional critical care team. The course format will include didactic lectures, hands-on activities and class-based discussions.

**YELP 702 Toxicology (2 QH)**
Pharmacists play an important role in the treatment of drug overdose. This course will address the provision of care in the “poisoned patient,” including clinical presentation, assessment and treatment of common drug, chemical and biologic agent overdoses. The format includes lectures by faculty and case discussions.

**YELP 703 Advanced Diabetes Management (2 QH)**
This elective course is designed to provide concentrated and in-depth knowledge of management of diabetes through hands-on learning in lecture and small group settings. Students will learn concepts required to provide comprehensive diabetes management including but not limited to medical nutrition, behavioral health, various blood glucose monitors and electronic apps,
complementary and alternative medicine, gestational and pediatric diabetes management, in-depth evidence-based therapeutic recommendations and making adjustments in therapy per patient outcome evaluation. Students will learn interprofessional aspects of providing care to patients with diabetes. As part of the course, students will be required to participate in a week-long experience as a patient with diabetes, in which they will self-administer injectable “insulin” and monitor blood glucose using a glucometer. Students will also engage in a patient care simulation to practice shared-decision making and educate patients on evidence-based therapeutic changes including lifestyle modifications.

**YELP 704 Advanced Mental Health (1 QH)**
This course will address advanced topics in mental health and neuropsychiatry as it relates to pharmacotherapeutic intervention. The specialized role of the pharmacist in the treatment of patients with psychiatric conditions will be discussed, including contributions to mental health advocacy. Students will gain an historical perspective on the treatment of psychiatric patients, evaluate key clinical drug trials as they relate to current treatment guidelines and advancements in psychiatric treatment, and discuss management of psychiatric conditions not covered in the pharmacotherapy series. Examples of topics discussed in this elective that are not covered in the core curriculum include mental health in the media, post-traumatic stress disorder (PTSD), personality disorders, child psychiatry, geriatric psychiatry, harm reduction strategies or others based on the interest of each class. This course will utilize a combination of lecture, small-group activities, case-based learning, discussion and student presentation.

**YELP 705 Advanced Pharmacoeconomics (2 QH)**
This course is designed to provide the student with the advanced concepts of economics and market forces in general. A detailed discussion on pharmacoeconomics as it relates to patient care and an overview of economic principles, which should enhance the understanding of the theory underlying pharmacoeconomic analysis, will be integrated in this course. A special emphasis will also be placed on applying the economic evaluations and quality of life concept to improve the allocation of limited healthcare resources. Upon completion of the course, the student should be able to apply the basic economic and pharmacoeconomic principles to make therapeutic and resources allocation decisions.

**YELP 706 Community Pharmacy Practice and Management (2 QH)**
This course is designed for student pharmacists with an interest in community pharmacy. Students will learn about the business and management aspects of community pharmacy, as well as opportunities for clinical services. Incorporating sustainable business models for the pharmacy and services offered will be a common theme. Communication skills will be emphasized throughout the course.

**YELP 707 Advanced Hematology and Oncology (1 QH)**
This elective course will cover advanced hematology and oncology topics, both disease states and supportive care issues. The course is intended to provide students with the knowledge required to provide complete care for a patient with cancer through study of various malignancies and discussion of current oncology topics.

**YELP 708 Lifestyle Medicine for Healthcare Professionals (1 QH)**
The purpose of this one-credit, interprofessional elective course is two-fold: 1) to develop students’ skills and knowledge on how to prevent, treat, and reverse chronic disease using evidence-based approaches and 2) to enhance students’ interprofessional collaboration and
communication within the learning of lifestyle medicine. Topics covered will include the key components of lifestyle medicine: physical activity, nutrition, sleep, stress resilience, mood, healthy relationships, and substance use. Content on evoking behavior change will be woven throughout. Course materials will be delivered through asynchronous and synchronous remote learning modalities, case discussions, and a hands-on culinary medicine lab experience.

**YELP 709 Spirituality and End of Life Care (2 QH)**
Throughout this elective, students will examine the philosophy and principles of palliative care and spirituality. They will explore the perceptions of emotional, spiritual, and physical well-being. The focus areas include management of quality of care through chronic illness and end of life care discussions with patients' friends and family. Specific areas will include pain management, communication strategies, and ethical issues that occur at the end of life.

**YELP 900 Pharmacy Practice Teaching Elective (1-2 QH)**
This independent study is an individualized learning experience designed to meet specific educational needs of the student.

**YELP 901 Pharmacy Practice Research Elective (1-2 QH)**
This independent study is an individualized learning experience designed to meet specific educational needs of the student.

**YELS 700 Cannabis: History, Pharmacology, Politics, and Medical Uses (1 QH)**
This course will discuss the long history of marijuana up to the present time. Included in that history will be the development of the many uses marijuana has had throughout the ages, culminating with its current status as a drug with multiple medical, as well as recreational, uses. The pharmacological basis (including biochemistry, physiology, neuroscience) for these uses will be presented, as well as the political and social factors that have influenced the use of the drug, both currently and over the years.

**YELS 701 Methods of Drug Design (1 QH)**
This elective course will examine the structure-activity relationships of drugs and how systematic alterations of chemical structure can be used to design and optimize drug molecules. Following a series of introductory lectures, students will select a class of drugs, investigate published structure-activity relationships, and give a presentation summarizing their findings. Students interested in pharmaceutical industry research and careers will benefit from taking this course. Students must complete the Medicinal Chemistry and Advanced Medicinal Chemistry course sequence before enrolling in this course.

**YELS 702 Advanced Topics in Infectious Diseases and Microbiology (2 QH)**
This infectious diseases course will utilize primary literature and case studies to discuss emerging antimicrobial resistance and its management. The course will also expose the students more in depth to the role of pharmacists on infectious diseases and antimicrobial stewardship teams, and debate a therapeutic controversy in the area of infectious diseases therapeutics.

**YELS 704 Basic Medical Spanish (1 QH)**
This is a self-paced online course available through www.canopyapps.com. The Basic Spanish component consists of the Beginner (Level 1) modules. The credit from Basic Spanish does not apply to the six required COP electives.
YELS 705 Advanced Medical Spanish (2 QH)
This is a self-paced online course available through www.canopyapps.com. The Advanced Spanish component consists of the Intermediate (Level 2) and Advanced (Level 3) modules. The credit from Advanced Spanish will count toward the six required COP electives.

YELS 706 Advanced Pharmaceutical Compounding (1 QH)
Advanced Pharmaceutical Compounding is designed to reinforce fundamental concepts and techniques involved in the extemporaneous compounding of non-sterile and sterile preparations. This course is designed to teach students how to create a master compounding record (protocol) for novel formulations and back ordered products. By the end of the course, students should be able to discuss the compatibility, efficacy, quality, safety and stability of these products. Accurate and effective pharmaceutical formulation is a key skill, which must be mastered by all student pharmacists. This is a 1 credit course, 3 hours per week. This course is highly recommended but not limited for the following students: those interested in specialty compounding pharmacy and those needing to obtain state licensure (e.g., of New York or Georgia).

YELS 707 Forensic Toxicology and Pharmacology (2 QH)
Through their pathophysiological effects, drugs may cause injury or death directly through their toxicity, or they may impair cognitive and physical abilities that indirectly cause injury to oneself or others. Alternatively, cognitive impairment may contribute to behaviors which do not cause physical injury but otherwise may contribute to the violation of the law or workplace standards (employment drug testing). This course will explore the legal ramifications of these drug actions, with a focus on evaluating the contribution of drugs to specific criminal and civil cases. Students will assume the role of the forensic scientist, reconstructing what likely happened in an incident based on available evidence and application of pharmacological and toxicological principles. In particular, students will use pharmacokinetics to calculate the concentration of a drug at the time of an incident based on a known dosing regimen or extrapolating backwards from lab tests. Secondly, based on the concentration and known physiological effects of the drug, students will assess whether and to what degree the drug caused the incident in question. As part of this analysis, the science of analytical drug testing will be covered, and students will learn to interpret and apply the results of forensic lab tests. In the course of completing these forensic exercises, students will reinforce and apply core principles of pharmacokinetics, and reinforce specific knowledge of mechanism of action and physiological effects (Pharmacodynamics) of drugs commonly involved in legal cases. This course will also equip students to better informed on public policy issues related to drugs, such as, for instance the legalization of marijuana and the appropriateness of specific legal limits of marijuana blood concentration when driving. This course will be directed by and based on the experience of the course director, who has worked as an expert witness on hundreds of legal cases involving drugs and alcohol.

YELS 900 Pharmaceutical Science Teaching Elective (1-2 QH)
This independent study is an individualized learning experience designed to meet specific educational needs of the student.

YELS 901 Pharmaceutical Science Research Elective (1-2 QH)
This independent study is an individualized learning experience designed to meet specific educational needs of the student.
YPHP 500A, B & C Introduction to Pharmacy Practice (1 QH)
This course will orient students to the profession of pharmacy and medical terminology needed for the program curriculum. The course will begin with an overview of the history, development, regulation, and scope of the pharmacy practice. After that, the course focuses on introducing the students to traditional and unique pharmacy career pathways including residencies and fellowship training.

YPHP 502 Introduction to Drug Information Resources (1 QH)
YPHP 502 is the first in a two-course Drug Information series. It is designed as a foundational course to provide students with the knowledge of the basic principles of drug information as they pertain to resource identification, information retrieval and appropriate referencing. In addition, career opportunities with a focus on drug information will be examined.

YPHP 504 Healthcare Systems (2 QH)
This course will discuss the complexities, features and challenges of the U.S. healthcare delivery system. Emphasis will be placed on the many roles of the pharmacist. The regulation and financing of health care, including methods for providing care (private vs. public plans, single payer, etc.) will be considered. The course also includes an intermediate discussion of ethics pertinent to the pharmacist’s role in healthcare delivery.

YPHP 505 Research and Statistics (2 QH)
The purpose of this course is to provide broad introduction to research and statistics, with the goal of promoting understanding of published research whereby students can practice evidence-based medicine. Students will learn how to identify and design high-quality research projects, as well as how to correctly analyze the results and draw appropriate conclusions. Students will also practice reviewing and critiquing recent research articles that are relevant to their profession.

YPHP 506 Pharmacy Skills Laboratory I (3 QH)
The Pharmacy Skills curriculum is designed to provide Doctor of Pharmacy students with practical knowledge, skills, and experiences for the practice of pharmacy. Pharmacy Skills I prepares the student for Introductory Pharmacy Practice Experiences (IPPEs) in the community pharmacy setting. In addition, students will learn and apply communication skills, effective patient interviewing skills, and Top 300 drug information. Students will participate in simulation in a community pharmacy setting as a part of this course.

YPHP 507 Pharmacy Skills Laboratory II (3 QH)
The Pharmacy Skills curriculum is designed to provide Doctor of Pharmacy students with practical knowledge, skills, and experiences for the practice of pharmacy. Pharmacy Skills II prepares the student for Introductory Pharmacy Practice Experiences (IPPEs) in the community pharmacy setting. Students will use and expand upon the knowledge, skills and behaviors acquired in Pharmacy Skills Laboratory I to learn effective patient counseling techniques. Student pharmacists will continue to develop clinical reasoning skills, practice professionalism and demonstrate Top 300 competency.

YPHP 508 Pharmacy Skills Laboratory III (2 QH)
This course is designed to incorporate elements from Pharmacy Skills I and II, and allow student pharmacists to further develop communication skills in the context of commonly used medications. The student pharmacist will become familiar with counseling patients on various dosage forms, refill medications, lifestyle modifications, and Top 300 drug information. Students will gain confidence in aspects of pharmacy practice that will lay a foundation for future Skills
YPHP 510 Self-Care and Non-Prescription Medications (3 QH)
The student pharmacist will learn to assist patients with the appropriate selection and use of nonprescription, as well as non-pharmacologic, treatment options for commonly encountered disease states and patient complaints. Patient assessment and education are key components to this course. Additional emphasis will be placed on patient self-monitoring, referrals, and follow-up.

YPHP 511 Pharmacy-Based Immunization Delivery (1 QH)
This course is the method in which the American Pharmacists Association (APhA) immunization certificate training program is offered to P1 students and is designed to ensure that all P1 students have an understanding of vaccine-preventable diseases and the role of pharmacists and students as vaccine advocates and administrators. Students will gain an understanding of the immunology, practice implementation, emergency management and legal and regulatory issues that pertain to immunization services. The self-study program includes a self-assessment test and real-life case studies that are designed to help reinforce and evaluate students’ understanding of key information and concepts. Weekly lectures will reinforce and expand on the self-study program and address areas such as immunization needs, legal and regulatory issues and injection-technique training. Students will be expected to demonstrate vaccine administration proficiency by giving intramuscular and subcutaneous injections. Completion of this course results in a certificate of completion issued by APhA.

YPHP 515A, B & C Introductory Pharmacy Practice Experience I (6 QH)
The Introductory Pharmacy Practice Experiences (IPPEs) are designed to provide the foundation for the student pharmacists in preparation for their Advanced Pharmacy Practice Experiences (APPEs). This course is a structured introduction to pharmacy practice in a community pharmacy setting. The community IPPE spans the P1 year, during which the students will engage in basic distributive and administrative processes in community pharmacies to gain initial experience interacting directly with patients, preceptors, technicians, other healthcare providers, and pharmacy personnel.

YPHP 519 Pathophysiology I (2 QH)
Pathophysiology I is the first of two courses that will translate knowledge learned in Fundamentals of Physiology I into knowledge of human disease. Key concepts include understanding of physiologic derangements in the development and progression of disease, clinical diagnosis and presentation, relationship to drug therapy intervention, and pertinent medical terminology. These concepts will be reinforced using case-based learning.

YPHP 520 Pathophysiology II (2 QH)
Pathophysiology II is the second of two courses that will translate knowledge learned in Fundamentals of Physiology I and II into knowledge of human disease. Key concepts include understanding of physiologic derangements in the development and progression of disease, clinical diagnosis and presentation, relationship to drug therapy intervention, and pertinent medical terminology. These concepts will be reinforced using case-based learning.

YPHP 604 Clinical Pharmacokinetics and Pharmacodynamics (2 QH)
This course expands upon the theoretical concepts explored in YPHS 600 Basic Pharmacokinetics and Pharmacodynamics. This course will focus on common clinical
pharmacokinetics/pharmacodynamic principles and their application to specific drug therapy regimen design, monitoring, and management.

**YPHP 606 Pharmacy Skills Lab IV (3 QH)**
This course is designed to prepare Doctor of Pharmacy students for the Introductory Pharmacy Practice Experiences in the health-systems setting and complement the pharmacotherapy course series. In addition to building on interpersonal communication skills learned in the Pharmacy Skills I - III series, the Pharmacy Skills IV - VI series will allow students to become familiar with basic health-systems pharmacy activities, including developing clinical/therapeutic decision-making skills and utilizing the Pharmacists’ Patient Care Process. Students will gain confidence in aspects of pharmacy practice that will lay a foundation for success in the P3 and APPE year.

**YPHP 607 Pharmacy Skills Lab V (3 QH)**
This course is the second in a series in the P2 year and is designed to complement the Introductory Pharmacy Practice Experiences in the health-systems setting and complement the pharmacotherapy course series. In addition to building on interpersonal communication skills learned in the Pharmacy Skills I - III series, the Pharmacy Skills IV - VI series will allow students to become familiar with basic health-systems pharmacy activities, including continuing to develop clinical reasoning skills, utilizing the Pharmacists’ Patient Care Process, providing written documentation of patient interactions and an introduction to sterile compounding. Students will gain confidence in aspects of pharmacy practice that will lay a foundation for success in the P3 and APPE year.

**YPHP 608 Pharmacy Skills Lab VI (3 QH)**
This course is the third in a series in the P2 year and continues to complement the Introductory Pharmacy Practice Experiences in the health-systems setting. In addition to building on skills learned in the Pharmacy Skills I-V series, students will learn the appropriate application of physical assessment findings in the management of drug therapies, Transitions of Care, and the management of acute situations such as Advanced Cardiac Life Support (ACLS) and Opioid-Associated Emergencies. Student pharmacists will continue to develop clinical reasoning skills, practice professionalism, calculations and demonstrate Top 300 competency.

**YPHP 615A, B & C Introductory Pharmacy Practice Experience II (5 QH)**
The Introductory Pharmacy Practice Experiences (IPPEs) are designed to provide the foundation for student pharmacists in preparation for their Advanced Pharmacy Practice Experiences (APPEs). This course is a structured introduction to pharmacy practice in a health-system setting. The health-system IPPE spans the P2 year, during which the students will engage in basic distributive and administrative processes in health-system pharmacies to gain initial experience interacting directly with patients, preceptors, technicians and other healthcare providers and pharmacy personnel.

**YPHP 620 Pharmacotherapy I (4 QH)**
This course is a study of the principles of drug therapy essential to the clinical practice of pharmacy integrating both basic and clinical science applications. Major topics covered include cardiovascular and pulmonary diseases. Topics presented include an overview of pertinent epidemiology, pathophysiology, diagnostics, clinical presentation and general management of disease states. Each topic will focus on using evidence-based medicine for the appropriate
selection of drug therapy and monitoring in order to optimize patient outcomes in a safe, cost-conscious manner.

YPHP 621 Pharmacotherapy II (4 QH)
This course is a study of drug therapy essential to the clinical practice of pharmacy integrating both basic and clinical science applications. Major topics include nephrology, electrolytes and acid-base disorders, endocrine disorders, and gastrointestinal disorders. Topics presented include an overview of pertinent epidemiology, pathophysiology, clinical presentation, diagnostics, and general pharmacotherapeutic management of covered diseases. Each topic will focus on using evidence-based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe and cost-conscious manner.

YPHP 622 Pharmacotherapy III (4 QH)
This course is a study of the principles of drug therapy essential to the clinical practice of pharmacy integrating both basic and clinical science applications. Major topics include mental health, neurology, pain management, and rheumatology. Topics presented include an overview of pertinent epidemiology, pathophysiology, diagnostics, clinical presentation and general management of disease states. Each topic will focus on using evidence based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe, cost-conscious manner.

YPHP 630 Gateway to Patient-Centered Care (1 QH)
This course is a summative evaluation of student performance in a simulated environment and overall retention of selected topics from the pharmacy curriculum to date. Students will be required to perform self-directed review of exam content as there will not be any lectures as part of this course. The course is comprised of a P2 OSCE (objective structured clinical examination) simulated experience as well as a comprehensive written exam called the Clinical Sciences Achievement Test (P2 CSAT).

YPHP 631 Literature Evaluation and Advanced Drug Information (3 QH)
The purpose of this course is 1) to aid students in developing skills to critically evaluate medical literature and 2) utilize drug information gathering and evaluation to disseminate appropriate information to other healthcare professionals. This course will review research methodology and statistical tests used in randomized controlled trials, observational studies, and meta-analyses. Students will further evaluate study results and identify trial limitations. Additionally, appropriate drug information search techniques, answering drug information questions, and formulary determination will be discussed in this course.

YPHP 632 Pharmacoepidemiology (1 QH)
Pharmacoepidemiology is the study of the uses and effects of drugs in patient populations. This course will introduce students to the basic principles of public health and epidemiology, including their application to the problem of healthcare disparities and development of activities that benefit the health status of populations. This course covers the principles and methods of epidemiologic investigation including epidemiologic study designs for investigating the etiology of disease. Students will also learn basic quantitative measures to determine association and risk.

YPHP 703 Pharmacy Management and Leadership (2 QH)
This course will provide a foundation to management and leadership in all settings of pharmacy practice. This course presents factors and issues involved in day-to-day operations of pharmacy management. Topics include but are not limited to: pharmacy-specific organizational
structure/management/leadership, communication, conflict management, negotiations, recruitment, hiring/firing, employee law, performance management, feedback delivery, financial management, inventory/purchasing, justifying/developing clinical care services, risk management, quality, innovation, entrepreneurship and business planning.

YPHP 706 Pharmacy Skills Lab VII (2 QH)
The Pharmacy Skills Laboratory VII will incorporate elements from Pharmacy Skills I - VI, and allow student pharmacists to enhance knowledge and skills learned throughout the Skills Education series. The Skills VII sequence will prepare students to successfully complete Advanced Pharmacy Practice Experiences with a focus on literature evaluation, journal clubs, prescription verification and medication counseling. Student pharmacists will continue to develop clinical reasoning skills, practice professionalism, calculations, and demonstrate Top 300 competency.

YPHP 707 Pharmacy Skills Lab VIII (2 QH)
The Pharmacy Skills Laboratory VIII will incorporate elements from Pharmacy Skills I - VII, and allow student pharmacists to enhance knowledge and skills learned throughout the skills education series. The Skills VIII sequence will prepare students to successfully complete Advanced Pharmacy Practice Experiences. Students will continue to develop clinical reasoning skills, practice professionalism, and demonstrate Top 300 and calculations competency.

YPHP 708 Pharmacy Skills Lab IX (1 QH)
This course will help prepare students to successfully complete Advanced Pharmacy Practice Experiences through the delivery of a professional seminar presentation on a medication-related topic. Students will utilize and incorporate literature evaluation skills learned in prior skills and drug information courses. In addition, students will develop skills in writing assessment questions, gain confidence in articulating critical thinking questions, and provide self and peer-evaluations in a constructive manner.

YPHP 709 Health Care and Pharmacy Law (3 QH)
This course is designed to review the history of pharmacy laws, and describe how these laws structure current practice guidelines and impact the distribution and dispensing of drugs. Students will learn the federal, state, and local statutes concerning pharmacy practice and healthcare policies relevant to the practice of pharmacy. Civil liability in pharmacy practice and professional ethics will also be discussed.

YPHP 710 Pharmacotherapy IV (3 QH)
This course is a study of the principles of drug therapy essential to oncology and transplant medicine. The course is structured using a systems-based educational approach with a particular emphasis on disease states most commonly seen in clinical practice. Essential pharmacology concepts are incorporated within each drug class unit to integrate clinical and basic science education.

YPHP 711 Pharmacotherapy V (4 QH)
The clinical application of drug therapy is discussed at an advanced level using a systems-based approach. Topics presented include an overview of pertinent epidemiology, pathophysiology, diagnostics, clinical presentation and general management of disease states. Each topic will focus on using evidence-based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe, cost-conscious manner.
YPHP 712 Pharmacotherapy VI (3 QH)
This course is a study of the principles of drug therapy essential to the clinical practice of pharmacy, integrating both basic and clinical science applications. Major topics covered include nutrition, gender-related health, geriatrics, pediatrics, and special populations. Topics presented include an overview of pertinent epidemiology, pathophysiology, diagnostics, clinical presentation, and general management of cover diseases. Each topic will focus on using evidence-based medicine for the appropriate selection of drug therapy and monitoring in order to optimize patient outcomes in a safe, cost-conscious manner.

YPHP 713 Pharmacogenomics (2 QH)
This course will provide an overview of molecular biology as it pertains to regulation of genetic information within the human body, with a focus on the types and sources of genetic variations and how these impact the clinical efficacy and toxicity of drugs currently utilized in practice. Admittedly, the topic of pharmacogenomics is an evolving one and thus not fully realized in all aspects of pharmacy. Therefore students will learn from and about clinical application in more progressive specialty settings while identifying future implications for therapeutic, economic, and ethical perspectives across pharmacy as a whole.

YPHP 714 Pharmacoeconomics (2 QH)
This course explores the factors underlying the pricing of drugs (development, testing, licensing, manufacturing, marketing, etc.) and the translation to healthcare costs. The macro/micro-economics of various aspects of pharmacy practice are discussed, including the impact of such pricing on hospital, retail and other environments. Financial aspects of pharmacy management are presented, including personnel and insurance costs, fixed and recurring expenses, etc. The course also includes drug reimbursement, Medicare-Medicaid, managed care organizations (insurance, formularies, etc.), formulary management and investments.

YPHP 715A, B, C & D Introductory Pharmacy Practice Experience III (3.5 QH)
The Introductory Pharmacy Practice Experiences (IPPEs) are designed to provide the foundation for student pharmacists in preparation for their Advanced Pharmacy Practice Experiences (APPEs). This course provides two elective opportunities in a variety of pharmacy practice settings occurring throughout the P3 year. Students will engage in distributive and administrative processes in a variety of pharmacy settings to gain experience interacting directly with patients, preceptors, technicians, other healthcare providers, and pharmacy personnel. Students will complete a service learning project as a part of this course. Students will also participate in a transition workshop to ensure students prepare for the advanced pharmacy practice experiences.

YPHP 716 A, B & C Interprofessional Case Collaborations (3 QH)
The purpose of this three-credit course is to prepare students to work together in collaborative interprofessional teams while understanding the concepts of pathophysiology, clinical presentation, diagnostic techniques and medical management and treatments as they apply to physician assistants and pharmacists. This course is a supplemental case-based course to the General Medicine (physician assistant) and Pharmacotherapy (pharmacy) courses. This course will also provide reinforcement of key concepts relevant to patient care as students work interprofessionally to solve case-based, patient-centered issues. Relevant interprofessional topics will be addressed throughout the course.
YPHP 719 Gateway to Clinical Practice (2 QH)
This course is designed as a reinforcing and application-based course to provide students with an opportunity to demonstrate APPE readiness by application and synthesis of materials presented in the didactic curriculum, including relevant pharmacy practice skills. The course will include multiple summative assessments and practicals, including the P3 Objective Structured Clinical Exam (OSCE).

YPHP 800A, B, C & D Practical Approaches to Professional Development (4 QH)
This course will provide opportunities for students to better transition from a fourth professional year student to an entry level practitioner. Throughout the course, student pharmacists will be expected to develop preparatory approaches for the NAPLEX and MPJE, actively participate in interprofessional simulations, and demonstrate growth in areas related to co-curricular activities.

YPHP 801 Advanced Pharmacy Practice Experience – Acute Care (9 QH)
APPEs fulfill at least 1440 hours of the curriculum. All students are required to complete six APPEs: four required APPEs, and two elective APPEs. Acute Care is a required APPE. This course is structured to give students hands-on experience working in an Acute Care pharmacy setting. The Acute Care APPE lasts 6 weeks (240 hours), during which the students will engage in patient-centered care, medication and disease management, and collaboration with other health care providers in a collaborative interprofessional setting. Students will enhance their experience interacting directly with patients, preceptors, and other health care providers. Documenting the care provided to patients and the impact on patient outcomes are integral to this experience. Interprofessional simulation activities are incorporated into this APPE.

YPHP 802 Advanced Pharmacy Practice Experience – Ambulatory Care (9 QH)
APPEs fulfill at least 1440 hours of the curriculum. All students are required to complete six APPEs: four required APPEs, and two elective APPEs. Ambulatory Care is a required APPE. This course is structured to give students hands-on experience working in an Ambulatory Care pharmacy setting. The Ambulatory Care APPE lasts 6 weeks, during which the students will engage in patient-centered care, medication and disease management, and collaboration with other health care providers. Students will enhance their experience interacting directly with patients, preceptors, and other health care providers. Documenting the care provided to patients and the impact on patient outcomes are integral to this experience.

YPHP 803 Advanced Pharmacy Practice Experience – Community Pharmacy (9 QH)
APPEs fulfill at least 1440 hours of the curriculum. All students are required to complete six APPEs: four required APPEs, and two elective APPEs. Community Pharmacy practice is a required APPE. This course is structured to give students hands-on experience working in a Community Pharmacy setting. The Community Pharmacy APPE lasts 6 weeks, during which the students will engage in patient care, distributive functions, and administrative processes in community pharmacies and enhance their experience interacting directly with patients, preceptors, technicians, and other health care providers and pharmacy personnel.

YPHP 804 Advanced Pharmacy Practice Experience – Health-Systems (9 QH)
APPEs fulfill at least 1440 hours of the curriculum. All students are required to complete six APPEs: four required APPEs, and two elective APPEs. Health-Systems pharmacy practice is a required APPE. This course is structured to give students hands-on experience working in a Health-Systems pharmacy setting. The Health-Systems APPE lasts 6 weeks, during which the students will engage in patient care, distributive functions, and administrative processes in
Health-Systems pharmacies and enhance their experience interacting directly with patients, preceptors, technicians, and other health care providers and pharmacy personnel.

**YPHP 805 Advanced Pharmacy Practice Experience – Patient Care Elective (9 QH)**
APPEs fulfill at least 1440 hours of the curriculum. All students are required to complete six APPEs: four required APPEs, and two elective APPEs. Patient Care Elective opportunities are offered in a variety of pharmacy practice settings. The rotation will be structured to give students hands-on experience working in the respective setting. The elective APPE lasts 6 weeks.

**YPHP 806 Advanced Pharmacy Practice Experience – Non-Patient Care Elective (9 QH)**
APPEs fulfill at least 1440 hours of the curriculum. All students are required to complete six APPEs: four required APPEs, and two elective APPEs. Non-Patient Care Elective opportunities are offered in a variety of pharmacy practice settings. The rotation will be structured to give students hands-on experience working in the respective setting. The elective APPE lasts 6 weeks.

**YPHS 501 Pharmaceutics I: Introduction to Pharmaceutical Sciences (3 QH)**
This course deals with the science of drug delivery and the dosage forms that enable the drug delivery. Material to be covered will include selected properties of drug substances that have an impact on the delivery of drugs to the human body, the dosage forms available for drug administration, and the therapeutic effect with respect to physical and chemical properties of drug in the solution.

**YPHS 502 Pharmaceutics II: Dosage Forms (2 QH)**
Pharmaceutics II is the second in the series of courses that describes the science of drug delivery and the dosage forms that enable the drug delivery. An introduction to pharmacokinetics will be provided as it relates to drug delivery and dosage forms. In addition, the main emphasis will be on drug delivery systems for a number of routes of administration, including novel or complex systems. The drug development process will be discussed. The course also develops knowledge of sterile dosage form and delivery systems, products of biotechnology and radiopharmaceuticals. Clinical correlations will be provided during the course to reinforce the use of this information in pharmacy practice. These will be comprised of various teaching methodologies including cases, problem solving exercises and other student-based active learning exercises.

**YPHS 503A & B Pharmaceutical Calculations (3 QH)**
This course covers all aspects of pharmaceutical calculations including fundamentals of measurement and calculation, measurement systems, dosage and concentration units, isotonic solutions, electrolyte solutions, parenteral admixtures, and calculations related to extemporaneous compounding. This course develops the knowledge and skills to prepare students for Basic Pharmacokinetics and Pharmacodynamics (YPHS 600).

**YPHS 504 Biochemical Principles for Pharmacy I (2 QH)**
This course provides the biochemical foundation for understanding protein structure and function; DNA structure, function, synthesis and repair; carbohydrate, lipid, and lipoprotein metabolism; vitamin functions; and other biochemical topics that enable the student pharmacist to understand drug action and disposition.
YPHS 506 Medicinal Chemistry (2 QH)
This course covers selected principles of physical chemistry as related to the pharmaceutical sciences including structure-activity relationships, functional groups, drug stability and solubility, acid-base chemistry, metabolic reactions and drug allergenicity.

YPHS 509A, B & C Pharmaceutical Non-Sterile Compounding (1 QH)
Pharmaceutical compounding is designed to introduce students to the fundamental concepts and techniques involved in the extemporaneous compounding of non-sterile preparations. Accurate and effective pharmaceutical formulation is a key skill, which must be mastered by all student pharmacists.

YPHS 510 Fundamentals of Physiology I (4 QH)
The fundamentals of human physiology relating to basic cellular function, neurophysiology, the cardiovascular system, respiration, the gastrointestinal system, the renal system and embryology will be presented. Physiological concepts and mechanisms will be organized according to five themes: homeostasis and control systems, biological energy use (metabolism), structure/function relationships, communication and pathophysiology.

YPHS 511 Fundamentals of Physiology II (3 QH)
This course is a continuation of YPHS 510 Fundamentals of Physiology I. The fundamentals of human physiology relating to the endocrine system (including reproduction), teratology, the autonomic nervous system, integument, connective tissue, skeletal muscle, hematology, immunology and coagulation will be presented. Physiological concepts and mechanisms will be organized according to five themes: homeostasis and control systems, biological energy use (metabolism), structure/function relationships, communication and pathophysiology.

YPHS 512 Biochemical Principles for Pharmacy II (2 QH)
This course is the second in a series and builds upon content from YPHS 504. It provides the biochemical foundation for understanding protein structure and function; DNA structure, function, synthesis and repair; carbohydrate and lipid metabolism; vitamin functions; and other biochemical topics that enable the student pharmacist to understand drug action and disposition.

YPHS 514 Fundamentals of Pharmacology (2 QH)
This course will primarily cover general principles of pharmacology and Autonomic Nervous System pharmacology, which together will establish a foundation for learning about the drug classes in Pharmacology I-III. The general principles section is divided into pharmacodynamics and pharmacokinetics, the latter of which includes drug absorption, distribution, metabolism, elimination, and dosage calculation. Pharmacological intuition as a tool to minimize memorization will be emphasized throughout the course. This class will also introduce cardiovascular pharmacology.

YPHS 600 Basic Pharmacokinetics and Pharmacodynamics (3 QH)
This course presents the basic fundamental principles underlying drug action in the body. Pharmacokinetics describes the relationship of drug dose and the time course of drug presence in the body, including the concepts of drug half-life, steady-state concentration, absorption, distribution, metabolism and excretion. Processes that influence the pharmacokinetics of drugs, including formulation, physicochemical, physiological, pharmacological and pathological factors, will be discussed. Pharmacodynamics presents the effects of drug action at the receptor site and includes the concepts of agonist, antagonist, competitive and non-competitive inhibition, and therapeutic effect. The use of mathematical equations to describe the pharmacokinetic
concepts and principles of drug action is introduced and applied to dosage regimen
determinations. The course teaches the fundamentals of calculations necessary to determine drug
loading dose, maintenance dose and dosing interval, and prepares the student for YPHP 604
Clinical Pharmacokinetics and Pharmacodynamics.

YPHS 610 Advanced Medicinal Chemistry I (1.5 QH)
This course covers the medicinal chemistry aspects of drug classes encountered in the
Pharmacology course. Topics in this course will parallel those in the Pharmacology I course.
Students will learn to recognize structures of major drug classes, and will learn to describe the
ways in which structural modification of a drug can lead to changes in activity, absorption,
distribution, metabolism, and excretion.

YPHS 611 Advanced Medicinal Chemistry II (1.5QH)
This course covers the medicinal chemistry aspects of drug classes encountered in the
Pharmacology course. Topics in this course will parallel those in the Pharmacology II course.
Students will learn to recognize structures of major drug classes, and will learn to describe the
ways in which structural modification of a drug can lead to changes in activity, absorption,
distribution, metabolism, and excretion.

YPHS 612 Advanced Medicinal Chemistry III (1 QH)
This course covers the medicinal chemistry aspects of drug classes encountered in the
Pharmacology course. Topics in this course will parallel those in the Pharmacology III course.
Students will learn to recognize structures of major drug classes, and will learn to describe the
ways in which structural modification of a drug can lead to changes in activity, absorption,
distribution, metabolism, and excretion.

YPHS 620A, B, & C Lifelong Learning Seminar (1 QH)
This course is designed to foster self-directed professional development of specific skills and
attributes as a result of student participation in non-course credit, professional activities outside
of the classroom or in their immediate practice environment.

YPHS 625 Pharmacology I (2.5 QH)
This is the second course in a series of four new pharmacology courses and will be offered in the
fall of the second professional year. The creation of the new pharmacology courses is part of an
effort to 1) co-sequence the pharmacology and pharmacotherapy sequences such that topics are
covered in pharmacology shortly before they are applied in pharmacotherapy and 2) to create a
course that caters to the specific needs of pharmacy students, including a deeper coverage of the
mechanisms of action of different drug classes.

YPHS 626 Pharmacology II (2 QH)
This is the third course in a series of four new pharmacology courses and will be offered in the
winter of the second professional year. The creation of the new pharmacology courses is part of an
effort to 1) co-sequence the pharmacology and pharmacotherapy sequences such that topics are
covered in pharmacology shortly before they are applied in pharmacotherapy and 2) to create a
course that caters to the specific needs of pharmacy students, including a deeper coverage of the
mechanisms of action of different drug classes.

YPHS 627 Pharmacology III (2.5 QH)
This is the fourth course in a series of four new pharmacology courses and will be offered in the
spring of the second professional year. The creation of the new pharmacology courses is part of
an effort to 1) co-sequence the pharmacology and pharmacotherapy sequences such that topics are covered in pharmacology shortly before they are applied in pharmacotherapy and 2) to create a course that caters to the specific needs of pharmacy students, including a deeper coverage of the mechanisms of action of different drug classes.

YPHS 720A, B & C Lifelong Learning Seminar (1 QH)
This course is designed to foster self-directed professional development of specific skills and attributes as a result of student participation in non-course credit, professional activities outside of the classroom or in their immediate practice environment.

YPHX 529A & B same as HIPS 515A & B
YPHX 566 same as MMTD 510
YPHX 667 same as MFPM 600
Clinical Affiliations
by Academic Program, Site and Site Location

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<th>Name of Clinical Site</th>
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<th>Pathologists’ Assistant</th>
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<td>Chicago</td>
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<td>Yuma Regional Medical Center</td>
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### Nurse Anesthesia

<p>| Advocate Christ Hospital | Oak Lawn | Illinois |
| AMITA Mercy Medical Center | Aurora | Illinois |
| AMITA Resurrection Hospital | Chicago | Illinois |
| AMITA St. Alexius Medical Center | Hoffman Estates | Illinois |
| AMITA St. Francis Hospital | Evanston | Illinois |
| AMITA St. Mary’s Hospital | Kankakee | Illinois |
| AMITA Health Saint Joseph Hospital Chicago | Chicago | Illinois |
| Ascension All Saints Hospital | Racine | Wisconsin |
| Ascension Columbia St. Mary’s &amp; St. Mary’s Ozaukee | Milwaukee/Mequon | Wisconsin |
| Ascension Southeast Wisconsin (Elmbrook, Franklin, St. Josephs, St. Francis) | Milwaukee | Wisconsin |
| Aurora Medical Center of Washington County | Hartford | Wisconsin |
| Captain James A. Lovell Federal Health Care Center (FHCC) | North Chicago | Illinois |
| Centura St. Anthony Hospital | Lakewood | Colorado |
| CGH Medical Center | Sterling | Illinois |
| Clement J. Zablocki VA Medical Center | Milwaukee | Wisconsin |
| Columbus Community Hospital | Columbus | Wisconsin |
| Community First Hospital | Chicago | Illinois |
| Edward Hines, Jr. VA Hospital | Hines | Illinois |
| FHN Memorial Hospital | Freeport | Illinois |
| Franciscan Health Crown Point | Crown Point | Illinois |
| Franciscan Health Olympia Fields | Olympia Fields | Illinois |
| Froedtert Memorial Lutheran Hospital | Milwaukee | Wisconsin |
| Gottlieb Memorial Hospital | Melrose Park | Illinois |
| HealthONE – Swedish Medical Center | Englewood | Colorado |
| KSB Hospital | Dixon | Illinois |
| Marshfield Clinic | Marshfield | Wisconsin |
| McDonough District Hospital | Macomb | Illinois |
| Mt. Sinai Hospital | Chicago | Illinois |
| Northwestern Huntley Hospital | Huntley | Illinois |
| Northwestern Kishwaukee Hospital | DeKalb | Illinois |
| Northwestern McHenry Hospital | McHenry | Illinois |
| Northwestern Memorial Hospital | Chicago | Illinois |
| NorthShore – Skokie Hospital | Skokie | Illinois |
| NorthShore – Swedish Hospital | Chicago | Illinois |</p>
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<td>Uropartners Surgery Center</td>
<td>Des Plaines</td>
<td>Illinois</td>
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### Psychiatric Mental Health Nurse Practitioner

<table>
<thead>
<tr>
<th>Medical Center</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM Woodstock</td>
<td>Woodstock</td>
<td>Illinois</td>
</tr>
<tr>
<td>NorthShore Evanston Hospital</td>
<td>Evanston</td>
<td>Illinois</td>
</tr>
<tr>
<td>NorthShore Highland Park Hospital</td>
<td>Highland Park</td>
<td>Illinois</td>
</tr>
<tr>
<td>Lurie Children’s Hospital</td>
<td>Chicago</td>
<td>Illinois</td>
</tr>
<tr>
<td>Lake County Health Department</td>
<td>Waukegan</td>
<td>Illinois</td>
</tr>
<tr>
<td>Captain James A. Lovell Federal Health Care Center (FHCC)</td>
<td>North Chicago</td>
<td>Illinois</td>
</tr>
</tbody>
</table>

### Allopathic Medicine

The Chicago Medical School provides students with clinical experiences that encompass a variety of sites in the Chicagoland area, southeastern Wisconsin, and in Billings, Montana. Many of these sites provide both inpatient and outpatient exposure. Private preceptors also contribute to student education especially in the pediatric and family medicine/primary care clerkships. There is one mandatory 4-week sub-internship during the fourth year. Options for this sub-internship include emergency medicine, family medicine, internal medicine, general surgery, psychiatry, neurology, and pediatrics. Fourth year electives are available locally and throughout the United States at health systems, residency programs, medical schools, and private practices.

<table>
<thead>
<tr>
<th>Medical Center</th>
<th>City</th>
<th>State</th>
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</thead>
<tbody>
<tr>
<td>Advocate Children’s Hospital</td>
<td>Oak Lawn</td>
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</tr>
<tr>
<td>Advocate Children’s Hospital</td>
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<tr>
<td>Advocate Christ Medical Center</td>
<td>Oak Lawn</td>
<td>Illinois</td>
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<tr>
<td>Advocate Condell Medical Center</td>
<td>Libertyville</td>
<td>Illinois</td>
</tr>
<tr>
<td>Advocate Good Shepherd Hospital</td>
<td>Barrington</td>
<td>Illinois</td>
</tr>
<tr>
<td>Advocate Illinois Masonic Medical Center</td>
<td>Chicago</td>
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<tr>
<td>Advocate Lutheran General Hospital</td>
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<tr>
<td>AMITA Health Resurrection Medical Center</td>
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<tr>
<td>AMITA Health Saint Joseph Hospital</td>
<td>Chicago</td>
<td>Illinois</td>
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<tr>
<td>AMITA Health Saints Mary and Elizabeth Hospital</td>
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<td>Illinois</td>
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<tr>
<td>Aurora Medical Center</td>
<td>Kenosha</td>
<td>Wisconsin</td>
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<td>Aurora Medical Center</td>
<td>Gurnee</td>
<td>Illinois</td>
</tr>
<tr>
<td>Captain James A. Lovell Federal Health Care Center (FHCC)</td>
<td>North Chicago</td>
<td>Illinois</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
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</tr>
<tr>
<td>Edward Memorial Hospital</td>
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<tr>
<td>Elgin Mental Health Center</td>
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<tr>
<td>Elmhurst Memorial Hospital</td>
<td>Elmhurst</td>
<td>Illinois</td>
</tr>
<tr>
<td>John H. Stroger, Jr. Hospital of Cook County</td>
<td>Chicago</td>
<td>Illinois</td>
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<tr>
<td>Lake County Health Department</td>
<td>Waukegan</td>
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<tr>
<td>OSF Little Company of Mary Hospital</td>
<td>Evergreen Park</td>
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<tr>
<td>MercyHealth</td>
<td>Rockford</td>
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<tr>
<td>Midwestern Regional Medical Center/CTCA</td>
<td>Zion</td>
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<tr>
<td>Mount Sinai Hospital Health System</td>
<td>Chicago</td>
<td>Illinois</td>
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<tr>
<td>Northwestern Medicine McHenry Hospital</td>
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<td>Illinois</td>
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<tr>
<td>RFU Health Clinics</td>
<td>Vernon Hills</td>
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<tr>
<td>Saint Anthony Hospital</td>
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<td>St. Bernard Hospital and Health Center</td>
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<td>Vista Medical Center East</td>
<td>Waukegan</td>
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<td>Weiss Memorial Hospital</td>
<td>Chicago</td>
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<tbody>
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<td>Carl T. Hayden VA Medical Center</td>
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<td>Creighton University</td>
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<tr>
<td>Eastern Colorado Healthcare System</td>
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<td>Colorado</td>
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<tr>
<td>Edwards Hines, Jr. VA Hospital</td>
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<td>Henry Ford Macomb Hospital</td>
<td>Clinton Township</td>
<td>Michigan</td>
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<tr>
<td>Jesse Brown VA Medical Center</td>
<td>Chicago</td>
<td>Illinois</td>
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<tr>
<td>John H. Stroger Jr. Hospital of Cook County</td>
<td>Chicago</td>
<td>Illinois</td>
</tr>
<tr>
<td>Loretto Hospital</td>
<td>Chicago</td>
<td>Illinois</td>
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<tr>
<td>New Mexico VA Health Care System (DVA)</td>
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<td>Provident Hospital</td>
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<tr>
<td>Salem Veterans Affairs Medical Center (DVA)</td>
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<td>Virginia</td>
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<td>University of Illinois-Chicago</td>
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<td>Illinois</td>
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<tr>
<td>University of California (UCLA)</td>
<td>Los Angeles</td>
<td>California</td>
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<td>VA Illiana Healthcare System (DVA)</td>
<td>Danville</td>
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<td>VA Puget Sound Health Care System (DVA)</td>
<td>Seattle</td>
<td>Washington</td>
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<td>Weiss Memorial Hospital</td>
<td>Chicago</td>
<td>Illinois</td>
</tr>
<tr>
<td>West Penn Hospital</td>
<td>Pittsburgh</td>
<td>Pennsylvania</td>
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</table>

Physician Assistant Practice

The clinical year clerkships are designed to provide a wide range of supervised clinical practice experiences, and to expand upon knowledge and skills gained during the didactic year. The department provides these experiences through a variety of clinical affiliations from private, single provider practices to large, multi-state health systems. Clinical affiliate locations may range from near the RFU campus, throughout the greater Chicagoland area, to adjacent or distant states. Students are responsible for arranging their own housing and transportation during clerkships.

Psychology

The Department of Psychology maintains a database of more than 100 clinical training site opportunities with locations throughout Chicagoland and southeastern Wisconsin. The Director of Clinical Training ensures placements for students until their third year in the program. Advanced students within the doctoral program are guided to apply to sites that fit well with their clinical and research interests and prepare them for competitive local and national Psychology internship sites. Clinical training placements build in frequency, duration and specialization throughout the course of each student’s enrollment. Additional questions regarding clinical training opportunities should be directed to the Director of Clinical Training within the Department of Psychology. For the Masters in Clinical Counseling program, students are placed at an appropriate training site to fulfill clinical training requirements.

Pharmacy

The College of Pharmacy is committed to ensuring that all clinical sites provide the scope, intensity and duration necessary to support the achievement of the profession’s standards. Prior to incorporation into our curriculum, all clinical sites are evaluated for their ability to promote a continuity of care between inpatient and outpatient settings, provide exposure to a diverse patient population and afford an opportunity for students to participate in patient care activities as a member of an interprofessional team that is appropriate for their level of training. Clinical sites are primarily located near the RFU campus, with limited options in distant states. Below is a partial list of example sites. For a current list of available sites, please contact the College of Pharmacy’s Director of Experiential Education.

<table>
<thead>
<tr>
<th>Association</th>
<th>Location</th>
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<tbody>
<tr>
<td>APhA American Pharmacists Association</td>
<td>Washington</td>
<td>District of Columbia</td>
</tr>
<tr>
<td>Food and Drug Administration (FDA)</td>
<td>Silver Springs</td>
<td>Maryland</td>
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<tr>
<td>CVS</td>
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<td>Nationwide</td>
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<tr>
<td>Mariano's</td>
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<td>Nationwide</td>
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<tr>
<td>Osco</td>
<td>Various</td>
<td>Nationwide</td>
</tr>
<tr>
<td>Walgreens</td>
<td>Various</td>
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<tr>
<td>Advocate Condell Medical Center</td>
<td>Libertyville</td>
<td>Illinois</td>
</tr>
<tr>
<td>Aurora Medical Center</td>
<td>Burlington, Kenosha, Lakeland</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>FHCC - Captain James A. Lovell Federal Health Care Center</td>
<td>North Chicago</td>
<td>Illinois</td>
</tr>
<tr>
<td>NorthShore University HealthSystem - Evanston Hospital</td>
<td>Evanston</td>
<td>Illinois</td>
</tr>
<tr>
<td>NorthShore University HealthSystem - Glenbrook Hospital</td>
<td>Glenbrook</td>
<td>Illinois</td>
</tr>
<tr>
<td>NorthShore University HealthSystem-Highland Park Hospital</td>
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<td>Illinois</td>
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<tr>
<td>NorthShore University HealthSystem - Skokie Hospital</td>
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</tr>
<tr>
<td>Northwestern Medicine Huntley Hospital</td>
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</tr>
<tr>
<td>Northwestern Memorial Hospital</td>
<td>Chicago, Lake Forest</td>
<td>Illinois</td>
</tr>
<tr>
<td>Rush University Medical Center</td>
<td>Chicago</td>
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