



**College of Health Professions**  
**ACADEMIC CATALOGUE 2009 - 2010**





## **COLLEGE OF HEALTH PROFESSIONS**

### **Academic Catalogue 2009 – 2010**

Rosalind Franklin University of Medicine and Science and the College of Health Professions reserve the right to change, at any time and without notice, their requirements, regulations, course and program offerings, fees, charges, and other matters addressed in this catalogue. RFUMS must reserve 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 admission thereto.

## TABLE OF CONTENTS

### General Content

Letter from the Dean .....	4
History.....	5
Mission and Vision.....	6
Equal Opportunity .....	6
Accreditation .....	7
Location .....	7
Classification of Students .....	7
Admissions Policies .....	7
Admission .....	9
Technical Standards.....	9
Transfer of Course Credits .....	9
Competency Testing.....	9
Non-Immigrant Alien Students.....	10
Registration and Withdrawal Policies .....	10
Tuition and Fees .....	10
Academic Standards of Performance and Their Measurement.....	11
Nonacademic Performance Standards.....	12
Statement of Policy on Professionalism and Ethics.....	12
Student Treatment.....	12
Leave of Absence .....	13
Student Housing .....	13
Health Care and Health Insurance .....	13
Financial Assistance .....	14
Student Records .....	14
Student Organizations .....	14
Student Policies, Records and Resources .....	14
Clinical and Education Centers.....	16

### Program Information

Department of Interprofessional Healthcare Studies.....	17
MS in Biomedical Sciences.....	20
MS in Clinical Laboratory Science .....	29
MS in Healthcare Administration and Management.....	35
MS in Health Professions Education.....	43
DSc/PhD in Women’s Health Programs .....	48
DSc/PhD in Interprofessional Studies.....	53
Department of Medical Radiation Physics .....	58
Department of Nurse Anesthesia.....	64
Department of Nutrition.....	73
Department of Pathologists’ Assistant.....	82

Department of Physical Therapy .....89  
    Doctor of Physical Therapy .....89  
    Post-Professional Doctor of Physical Therapy .....98  
    MS of Physical Therapy .....103  
Department of Physician Assistant .....111  
Department of Psychology.....119  
    MS in Psychology: Clinical Counseling.....119  
    PhD in Clinical Psychology .....126

*Dear Prospective Student,*

*Thank you for your interest in the College of Health Professions at Rosalind Franklin University of Medicine and Science. Within the pages of this academic catalogue, you will find a wealth of information about our academic programs, including course descriptions, application procedures, financial assistance options, and much more.*

*An education at the college of Health Professions offers a personalized, innovative and integrated experience that is aimed at enabling the beginning or continuation of rewarding careers in health care. Whether you are interested in doctoral study or certificate programs, full-time or part-time enrollment, the College offers leading-edge curricula that fit many ambitions and lifestyles.*

*Your interest in the College of Health Professions honors and inspires us. We hope your interest in our programs is the start of a fulfilling and successful future.*

*Sincerely,*

A handwritten signature in black ink that reads "Wendy Rheault". The signature is written in a cursive style with a small flourish at the end.

Wendy Rheault, PhD, PT  
Dean

## HISTORY

Rosalind Franklin University of Medicine and Science is a four-college University that was built around the Chicago Medical School (CMS), which has been educating physicians and furthering biomedical research for 95 years. From the first days in 1912, the physician and citizen founders of CMS aimed to establish a combined medical school and hospital in which employed men and women could study medicine at night, a common practice at the time. The School's noteworthy period of development took place under the direction of John J. Sheinin, MD, PhD, DSc, who served as dean and president from 1932 to 1966. It was during his administration that CMS successfully met the challenges arising from the revolutionary restructuring of American medical education following the Flexner Report.

In 1930, the Medical School moved to what was to become one of the world's largest aggregations of medical facilities. Located just west of downtown Chicago, this complex contained three medical schools, seven hospitals, colleges of dentistry, pharmacy and nursing, and two undergraduate universities. CMS occupied an 11-story facility in the renowned research and educational center.

In 1967, the University of Health Sciences (UHS) was established. The University comprised the Chicago Medical School (CMS), the School of Related Health Sciences (SRHS, now College of Health Professions), and the School of Graduate and Postdoctoral Studies (SGPS). The College of Health Professions first opened its doors in 1970, when two baccalaureate programs, Physical Therapy and Medical Technology (now Clinical Laboratory Sciences), were established. Since that time, the College has expanded its offerings to include masters- or doctoral-level programs in the following areas: Nutrition, Physician Assistant, Pathologists' Assistant, Physical Therapy, Healthcare Management, Interprofessional Healthcare Studies, Women's Health, Medical Radiation Physics, Nurse Anesthesia, Biomedical Sciences, and Clinical Psychology. In 1980, the University relocated to its current campus in North Chicago, IL, adjacent to the North Chicago Veterans Affairs Medical Center and Naval Station Great Lakes. In 1993, the institution was renamed for its long-time leader and Chairman of the Board of Trustees, Mr. Herman M. Finch. The University of Health Sciences/The Chicago Medical School, granted full accreditation by the North Central Association of Colleges and Schools in 1980, represented one of the first educational institutions in the country devoted exclusively to educating men and women for a broad range of professional careers in health care and research. In 2001, the Dr. William M. Scholl College of Podiatric Medicine (established in 1912) became part of the University structure, which now comprises four colleges. On January 27, 2004, the University publicly announced its intent to change its name to Rosalind Franklin University of Medicine and Science, in honor of Rosalind Franklin, PhD, a pioneer in the field of DNA research. The name change became legal on March 1, 2004, at which time the School of Related Health Sciences also changed its name to College of Health Professions.

In addition to the name change and the announcement of several new strategic initiatives, the University is currently in the midst of profound physical growth. In October 2002, the University opened its Health Sciences Building, a 140,000 square-foot state-of-the-art facility that houses laboratories, auditoriums, classrooms, departmental offices, a student union, the Feet First Museum, University bookstore, recreational game room, exercise facility, and a café. The University became a residential campus for the first time in its history when three student housing facilities, totaling 180 apartments, opened in July 2003. And in 2006 the University opened a two-story, \$10 million research expansion to further its mission of scientific discovery.

The University's Basic Sciences Building is a 400,000-square-foot facility that houses a 52,000-square-foot Library and The Daniel Solomon, MD, and Mary Ann Solomon Learning Resource Center as well as administrative offices, classrooms, auditoriums, basic science departments, research and teaching laboratories, and dining areas.

University enrollment exceeds 1,900, with the bulk of its students enrolled in CMS. The University's total faculty is 820. Major hospital affiliates include: North Chicago Veterans Affairs Medical Center, John H. Stroger, Jr., Hospital of Cook County, Mount Sinai Hospital and Medical Center, and Lutheran General Hospital. The University's clinical campus consists of the North Chicago Veterans Affairs Medical Center, The Captain James A. Lovell Federal Health Center, and the Rosalind Franklin University Health System.

Dr. Rosalind Franklin, through her pioneering work in the science of life and through her unflagging perseverance, serves as a role model for our faculty and students, and represents the future of biomedical science and integrated health care. Her history mirrors our own in many profound ways, marked by dedication to discovery even in the midst of difficult times. Upon that history, her legacy guides the future of the University itself.

After 95 years of excellence in healthcare education, Rosalind Franklin University of Medicine and Science has only just begun to write its history. We hope you will join us in creating bold visions for an ambitious future.

To learn more about Dr. Rosalind Franklin and the University's dedication to her legacy, visit [www.lifeindiscovery.com](http://www.lifeindiscovery.com).

### **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**

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

### **EQUAL OPPORTUNITY**

It is the policy of Rosalind Franklin University of Medicine and Science not to discriminate on the basis of race, sex, sexual orientation, color, creed, religion, national origin, disability or age in admissions or employment or in any programs or activities. It is the University's intent to comply with applicable statutes and regulations, including Title IX of the 1972 Education Amendments and Section 504 of the Rehabilitation Act of 1973. Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 both prohibit discrimination against individuals with disabilities by mandating a provision of reasonable accommodations to make limitations to what services can be provided. It is the University's goal to assist students in developing their potential in light of what is feasible and reasonable under the law. Refer to the [RFUMS Student Handbook](#) for Educational Opportunity Policies and Procedures.

## ACCREDITATION

Rosalind Franklin University of Medicine and Science receives its degree-granting authority from the Illinois Board of Higher Education and is accredited through the North Central Association of Colleges and Schools.

North Central Association of Colleges and Schools  
Higher Learning Commission  
30 North LaSalle Street, Suite 2400  
800.621.7440  
312.263.0456



## LOCATION

The College of Health Professions is located in the 140,000-square-foot Health Sciences Building on the campus of Rosalind Franklin University of Medicine and Science, at 3333 Green Bay Road, North Chicago, IL 60064. The University is situated in the northern suburbs of Chicago, with easy access to downtown Chicago and the surrounding areas by car or public transportation. Chicago is arguably one of the foremost cultural, educational and scientific centers of the world. University students enjoy an environment rich in cultural and leisure activities, with neighboring communities that boast award-winning restaurants, museums and more. For directions and a map, click [here](#).

## CLASSIFICATION OF STUDENTS

There are three categories of students:

1. *Regular Students* — This category includes all full-time and part-time students who have met the admission requirements and are matriculating for a degree. Full-time students are enrolled for at least 12 quarter hours per quarter.
2. *Conditional and Preliminary Students* — This category includes students whose regular applicant file shows insufficient achievement in one or more area. A probationary acceptance is offered during which time the student is given the opportunity to prove his or her academic ability or complete necessary prerequisites.
3. *Student-at Large Students* — The student in this category is a non-degree seeking student who wishes to take less than 1 year worth of coursework at the University and who does not intend on enrolling in the program after the conclusion of the course. A short application is required for this type of student, which must be requested from Enrollment Services by the chair of the department in which the course(s) are being taken.

## ADMISSIONS POLICIES

To fulfill the mission of Rosalind Franklin University of Medicine and Science, the admissions policies are designed to ensure that our selection process matriculates a class made up of individuals capable of meeting the needs of current and future patients and advancing scientific research that will shape the future of

healthcare. The training of a healthcare professional should provide them with the ability to make appropriate diagnostic and treatment decisions in a manner that understands and respects a patient's cultural, financial and social background. The training of exceptional biomedical scientists should be highly research-based and collaborative to provide students with the foundation necessary to contribute to the advancement of biomedical sciences.

The University recognizes that an educational experience that fulfills these goals must extend beyond formal education to include the cultural environment provided by their fellow students. Applicants will be evaluated not only for educational potential, but with the aim of providing diverse educational experience for other members of the class. The diversity that is sought in the student body should include gender, geography, racial or national origin, cultural identity, foreign language skills, life experiences, and other unique abilities and qualities.

Every successful applicant is expected to embody a set of core attributes.

- (1) Intellectual capacity. This is assessed using the undergraduate grade point average, the combined undergraduate science and mathematics grade point average and standardized test scores. The grade evaluation includes the quality of the undergraduate institution, the difficulty of the course load, and the trend of grades.
- (2) Dedication to healthcare, science, and service. Assessment can include documented interest in healthcare, knowledge of current healthcare problems and issues, healthcare- or service-related employment, participation in community and school service activities.
- (3) Communication skills. Strong communication skills as provided by the written application and testimony of references and, in particular, as demonstrated during the interview process are essential attributes for a successful applicant.
- (4) Integrity. All applicants are expected to have demonstrated adherence to ethical principles in their past experiences and in the application process.

Many of the applicants will have past experiences, knowledge, and characteristics that can contribute to both the educational experience of their classmates and to the practice of health professions. The following is a summary of those attributes that can build a diverse class that enhances the educational experience of the class and provide for quality patient care in the future.

- (1) Geographic diversity. An appropriate mix of students from the local area, the nation, and from other countries will be sought. The mix will include as well those who may indicate a desire to serve in populations of underserved, such as inner city residents, the financially disadvantaged, minority populations, or the uninsured.
- (2) Race and ethnicity. Applicants from groups underrepresented in healthcare and science will provide opportunities for all students to benefit from interactions with peers with diverse experiences, personal characteristics, and backgrounds.
- (3) Life experiences. A career in healthcare and biomedical research requires interaction with a diverse population of patients and professionals. As such, we seek out students with a wide variety of racial, ethnic and cultural backgrounds. Experiences with other ethnicities and cultures are considered valuable, such as study abroad, involvement with multicultural organizations, or other unique life experiences.

- (4) Educational background. Applicants with degree majors outside of the sciences also provide the potential for contributing to the educational experience of the class and to future interaction with individuals with diverse backgrounds. Knowledge of a second language, particularly Spanish, is considered a valuable attribute for the future practice of health sciences. Finally, applicants who present with graduate degrees, such as J.D., Masters in Public Health, Ph.D. etc, have additional skills and experiences that will be valuable both to classmates and to future colleagues.
- (5) Leadership. Any healthcare professional could assume the role of leader of a healthcare or research team. In addition, good leaders while in school can contribute to their community of classmates and to the University. Previous leadership experience as documented in the application and supporting documents will be considered in assessing leadership.
- (6) Research experience. A meaningful research experience can provide an additional perspective to the field of health science and provide analytical tools for possible future research activities.

The above policy is not intended to be an exhaustive list of the many attributes, factors, and conditions that are considered in the admissions process. Every applicant is evaluated individually.

### **ADMISSION**

Prospective students are invited to discuss their educational goals with the department before applying. This section of the catalog describes only the general procedures for admission to the College of Health Professions. In addition, each department has specific minimum requirements for admission; prospective applicants are urged to review these requirements in the individual sections listed for each department.

Students are expected to begin their studies at the department's preferred start date. When available resources permit, a student may begin studies at the start of other academic quarters. Applicants who wish to investigate this alternative are invited to discuss the possibility with the appropriate department chair.

### **TECHNICAL STANDARDS**

Candidates are considered for admission without regard for disabilities, as required under the Americans with Disabilities Act and related legislation. However, each department within the College of Health Professions has determined a series of abilities and skills that are required of all students. Inquiries about policies on disabilities should be directed to the Americans with Disabilities Act (ADA) coordinator in the Division of Student Affairs and Enrollment Management.

### **TRANSFER OF COURSE CREDITS**

Students completing courses in fully accredited institutions, or at those institutions that are in some phase of the accreditation process by a recognized accrediting body, will be reviewed for credit transfer if grades are "C" or better. (See individual program requirements.)

### **COMPETENCY TESTING**

The College of Health Professions recognizes that knowledge, competence and skill may be acquired under circumstances and in places other than formal and traditional educational institutions. Therefore, credit and advanced standing may be granted for relevant knowledge, competence and skill developed in such places as the Armed Forces, proprietary institutions and on-the-job experience.\* However, the College of Health

Professions reserves the right to assign such credit and/or advanced standing to the applicant on the basis of some acceptable measure of competence in the field, discipline, or subject in question. Among these measures of competence may be any of the following: assessment of work experience in relationship to the profession for which the student is being trained; subject matter examinations prepared by the College Entrance Examination Board or the Armed Forces. \*Not applicable to all programs.

For more information visit [CHP Office of Admissions](#) website.

### **NON-IMMIGRANT ALIEN STUDENTS**

The College of Health Professions is authorized under federal law to enroll non-immigrant alien students. Information about appropriate certification of alien students is available from the Office of Admissions.

### **REGISTRATION AND WITHDRAWAL POLICIES**

#### **Withdrawal and Adding Courses after Registration**

A student may withdraw from a course up to and including the fourth week of study upon the recommendation of the department or course instructor and the letter "W" will be recorded on the official transcript. No withdrawal will be allowed after the fourth week of class without indicating a pass or fail status.

#### **TUITION AND FEES**

The deposit fee to hold a place in class is applied to the first quarter tuition at registration.

Tuition and fees are due the first day of each term according to the University academic calendar, regardless of when classes actually start. Beginning on the first day of each quarter, a penalty fee of 7% and an interest fee calculated on a daily basis at the rate of 18% per annum is assessed to each student's account which is not yet paid.

Failure to pay tuition and fees in full by the end of the academic quarter will result in a student not being allowed to register for the subsequent quarter.

The University requires that all students maintain hospitalization and medical expense insurance. Proof of satisfactory hospitalization is required. If not available, the student must make application for such coverage through the University. Information is available in the Business Office. Enrollment in the university plan must be completed at the time tuition is paid. Please be prepared with a check or cash to cover the cost. All students must enroll for the complete program or sign a waiver form upon payment of tuition. Students will be required to remit the tuition at the time of registration.

#### **Fees for Auditing**

A student may audit a course with the written permission of the instructor. Transfer from Credit to Audit is permitted within the first two weeks. Transfer from Audit to Credit is not permitted after classes have begun.

#### **Refunds**

If a student withdraws from a program before the end of the first week of classes, 100% refund of tuition is made. When withdrawal is made before the end of the second week, the refund is 75%; before the end of the third week, 50%, before the end of the 4th week, 25%. After that time, no refund is granted.

## ACADEMIC STANDARDS OF PERFORMANCE AND THEIR MEASUREMENT

### Grading System

Grade point average is computed on a 4.0 scale. GPA hours attempted and corresponding (quality) honor points earned include RFUMS courses for which A, B, C, D, or F grades are given.

A— High achievement	4 points
B— Above average achievement	3 points
C— Average achievement	2 points
D— Below average but passing	1 point
F— Fail	0 points
I — Incomplete	0 points
Incomplete must be removed by the end of the following quarter; otherwise, deficiencies that have not been removed will be subject to a grade of “F”.	
W— Withdrawal	0 points
# — Credit and final grade to be awarded at the end of the course sequence.	0 points
P — Pass	0 points
Credit only; no grade point value	

### Credit

Baccalaureate and Post-baccalaureate credit is recorded in quarter hours. One quarter hour represents one 50 minute period of classroom work each week for the duration of one quarter, which is eleven to twelve weeks in length, or the equivalent in laboratory or field work.

### Incomplete Grades (I)

A grade of Incomplete (I) may be given to a student who, because of extenuating circumstances, has not completed the final project and/or the final exam requirements. In requesting an Incomplete grade, students must seek the consent of the instructor prior to the date on which final grades are submitted to the Registrar. Students are required to file an acceptable plan for removing the Incomplete grade with the instructor. Incompletes must be removed by the end of the following quarter; otherwise, deficiencies that have not been removed are subject to a grade of “F.” The grade “I” is recorded on the academic transcript; a letter grade is assigned only after the course requirements are completed.

### Graduation with Honors

The student with the highest GPA above 3.65 in each program is awarded the “Dean’s Award” upon graduation.

### Academic Standards

The College of Health Professions expects students to pursue studies in a manner that will prepare them for excellence in their chosen health profession. Each department or program may set standards for promotion. Students not meeting such standards will be notified by the department.

### **Academic Dismissal from a Program**

Specific information is available in the [CHP Student Handbook](#). Consult the department for complete information.

### **Students-at-Large**

Students-at Large are expected to maintain the academic performance standards required of other graduate students.

### **Retaking Courses**

The College of Health Professions discourages the retaking of courses or examinations to improve grades. Courses and examinations may be retaken only after approval. Grades are recorded for both courses.

### **NON-ACADEMIC PERFORMANCE STANDARDS**

Students in the College of Health Professions are subject to dismissal for unethical and/or unprofessional behavior in their student role.

### **STATEMENT OF POLICY ON PROFESSIONALISM AND ETHICS**

All students at Rosalind Franklin University 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 trust worthy, 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.

### **Procedures for Consideration of Violations of Professional and Ethical Standards**

A student alleged to have committed ethical or professional misconduct shall be afforded due notice and process in the investigation, deliberation, and decision about such allegations and potential penalties. The procedures for dismissal for unethical non-academic conduct may be found in the [CHP Student Handbook](#).

### **STUDENT TREATMENT**

Students have a right to work and study in an environment free from harassment; as such, the University will not tolerate student mistreatment. A primary goal of RFUMS is the education of students who will meet the health care needs of society in a caring, competent, and professional manner. Insensitivity during training/education 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. Refer to the [RFUMS Student Handbook](#) for the Student Mistreatment Statement.

## LEAVE OF ABSENCE

Regular students in the College of Health Professions are expected to maintain continuity and diligence in pursuing a specified advanced degree. When, for any reason, a student must be absent from academic study at the University, departmental approval must be obtained. Students shall petition the Dean for a leave of absence and receive approval before leaving.

A request for leave of absence during a period of academic difficulty is authorized only after careful consideration. In general, such leave is granted only after agreement on a structured program of activities to be pursued during the leave of absence. These activities are designed to help students overcome academic difficulties; they will have to be successfully completed as a condition for re-admittance to classes.

Leaves of absence requested for reasons of health, maternity, or finances are granted as a matter of course. Upon resolution of the conditions for which leave was granted, students are readmitted to the same academic standing that existed when the leave began.

## STUDENT HOUSING

The University has three student housing buildings located on campus, housing approximately 240 students each year. Students who choose to live in the halls have the opportunity to live on campus and participate in programming and events provided by the Community Managers in each building. For more information about living on campus visit the [Office of Student Housing](#) website.

## HEALTH CARE AND HEALTH INSURANCE

### Health Insurance

All students are required to obtain and maintain health insurance while they are enrolled in the University.

Students may purchase insurance coverage under the University's group policy for themselves and their family while attending the University. Contact the Business Office to discuss plan options and to obtain an application. Please note that if the student withdraws or is dismissed from the University, his/her coverage under the University's policy will be cancelled. Also, group coverage will terminate upon graduation.

If the student elects to purchase coverage from another source or continue other current coverage, he/she will be required to provide proof of insurance at the time of registration. In the case where such insurance is through a managed care plan, the student should verify that he/she will be entitled to benefits coverage for services provided at Rosalind Franklin University Health System. Many managed care plans provide coverage only in certain regional areas and for specific panels of contracted physicians. Questions regarding benefits coverage should be directed to the member services phone number on the student's insurance card.

### Dental Insurance

RFUMS has available a dental plan that students may elect to join. New students will have the opportunity to enroll at the time of their initial registration at the University or at the beginning of every month thereafter. For additional information, please contact the Business Office.

## **FINANCIAL ASSISTANCE**

To meet the cost of attending the College of Health Professions, students, spouse and parents are expected to provide financial support to the extent they are able. When family resources are insufficient to meet college costs, students are encouraged to seek assistance from the following currently existing programs. Please refer to the [RFU Financial Aid Office](#) for more information regarding financial resources.

## **Financial Aid Information**

Individuals who wish to apply for financial aid should ensure that their graduate program applications are submitted well before the enrollment deadline to allow adequate time for document processing. Students must enroll in 6 hours per quarter to be eligible for financial aid. Applications for federal student aid are available online at: [www.fafsa.ed.gov](http://www.fafsa.ed.gov) and are available every February for the following academic year. The code for Rosalind Franklin University of Medicine and Science is 001659.

## **STUDENT RECORDS**

All documents and records pertaining to a student's admission and academic performance in the University are filed in the Office of the Registrar. Refer to the [RFUMS Student Handbook](#) for information regarding Students' Personal and Academic Information.

## **STUDENT ORGANIZATIONS**

The College of Health Professions is concerned with the total educational environment of its students and strives to facilitate their personal growth as well as intellectual development. For a listing of student organizations, please click [here](#).

## **University Student Council**

Students in all schools participate in the University Executive Student Council. This group, organized and run entirely by students, concerns itself with the overall policy and direction of the institution as these relate to student concerns. In addition, the Council plans and supports campus social events and student delegate trips to national professional group meetings. It also names student representatives to school committees.

## **STUDENT POLICIES, RECORDS AND RESOURCES**

Refer to the [RFUMS Student Handbook](#) for information topics which include:

### **STUDENT CONDUCT POLICY**

### **CAMPUS LIFE**

### **EDUCATIONAL OPPORTUNITY POLICIES AND PROCEDURES**

### **INFORMATION TECHNOLOGY SERVICES: PRINCIPLES AND POLICIES**

### **MISSING PERSON POLICY**

### **STUDENT HEALTH AND WELL-BEING**

- I. ACCOMMODATIONS AND STUDENT DISABILITY
- II. EXPOSURE INCIDENTS
- III. IMMUNIZATION REQUIREMENTS AND RESOURCES
- IV. INSURANCE
  - Health Insurance
  - Dental and Vision Insurance

**STUDENTS' PERSONAL AND ACADEMIC INFORMATION**

- I. ACADEMIC PERIOD
- II. STUDENT RECORDS
- III. POLICY STATEMENTS AND GUIDELINES
  - Public Information
  - Confidential Information
  - Rights of Access and Review of Records
  - Limitation on Access
  - Supplementary Exceptions
  - Custodians of Student Records
  - Release of Grades
  - Right to Challenge Content of Records
  - Creation, Permanence, and Disposal of Student Records
  - Transferring Admissions Records to the Registrar's Office

**RESOURCES**

- I. BUSINESS SERVICES
- II. CAMPUS SECURITY
- III. DIVISION OF STUDENT AFFAIRS
  - Academic Support Services
  - Disability Support Services
  - Fitness and Recreation
  - Multicultural Student Services
  - Student Counseling Service
  - Student Housing
  - Student Life
  - Tutoring and Study Skills Assistance
- IV. FINANCIAL AID OFFICE
- V. FOOD SERVICE
- VI. INFORMATION TECHNOLOGY SERVICES
  - Desire2Learn (D2L)
  - Student E-mail
  - Student Housing Network and Telephone Access
  - Technology Purchase Information
  - WebAdvisor
  - Wireless Network Information
- VII. INSURANCE
  - Disability Insurance
  - Health Insurance
  - Malpractice Insurance
- VIII. LEARNING RESOURCES
  - Academic Computing Labs
  - Boxer University Library
  - Educational Technology
  - Information Commons
  - Presentation Practice Room
  - Small Group Rooms
  - 24-Hour Study Space
- IX. PARKING ON CAMPUS
- X. STUDENT COUNCIL AND STUDENT ORGANIZATIONS
- XI. STUDENT EMPLOYMENT
- XII. STUDENT HEALTH

**XIII. TRANSPORTATION OPTIONS**

- Airport Transportation
- Metra Train Service
- University Van Shuttle to Metra Station
- Pace Bus Service

**CLINICAL AND EDUCATIONAL CENTERS**

The College of Health Professions has developed a teaching relationship with a number of educational and healthcare facilities to broaden the learning experience of its students. These facilities are listed at the end of the catalogue.

## DEPARTMENT OF INTERPROFESSIONAL HEALTHCARE STUDIES

The Institute of Medicine reports that an interprofessional healthcare model is vital to effective patient care. At Rosalind Franklin University of Medicine and Science, interprofessional practice begins with interprofessional education. Our students gain the foundation and skills necessary to remain competitive in the ever-evolving field of health care.

The Interprofessional Healthcare Department is committed to providing proactive and innovative experiences that enable professionals to become collaborative practitioners. Programs in Clinical Laboratory Sciences, Biomedical Sciences, Healthcare Administration and Management, Health Professions Education, Women's Health and Interprofessional Studies offer healthcare professionals the opportunity to study in an interprofessional environment to enhance their communication skills and professionalism necessary to participate as part of a multi-specialty healthcare team.

### Degree/Certificate Programs

Master of Science in Clinical Laboratory Science, Master of Science in Biomedical Sciences, Master of Science or Certificate in Healthcare Administration and Management, Master of Science or Certificate in Health Professions Education, Master of Science or Certificate in Women's Health and Doctor of Science or Doctor of Philosophy in Interprofessional Studies

### Application Information

Applications are available through the College of Health Professions [Admissions Office](#) at 847-578-3209 or by email.

Applications for the MS in Biomedical Sciences are due June 15<sup>th</sup>. The program begins in the fall quarter. Applications for the other five programs are reviewed on a quarterly basis with **Fall Quarter enrollment strongly preferred**. Please be aware that entry into the program during Winter or Spring Quarters may increase the length of time required for program completion due to course sequencing and availability. Completed applications, including transcripts and letters of recommendation, must be received by:

- August 1st for fall quarter
- October 26th for winter quarter
- February 8th for spring quarter

### Transfer Credit

No transfer credit is awarded for the MS in Biomedical Sciences. For the other five programs a maximum of 9 quarter hours of graduate credit may be accepted from other accredited institutions.

Students requesting transfer credit must apply in writing to the chairman of their individual department. The Admissions committee for that department evaluates the appropriateness of the course for transfer. The coursework must be from an accredited college or university. Transfer credit may be allowed for individual courses in which the final grades are "B" or better.

No credit will be given for life experience. No credit can be earned through proficiency examinations.

## Instructional Format

Coursework for the Biomedical Sciences Program is completed on campus and online. Coursework for the Healthcare Administration and Management programs and the Certificate in Women's Health program is completed online with no on-campus requirement. The Master of Science in Women's Health, Health Professions Education and Clinical Laboratory Sciences programs are completed predominately online with a flexible on-campus component prior to graduation. The DSc/PhD programs have online and on-campus requirements. For online courses, students, faculty and staff maintain contact and interact via the Internet with a user-friendly learning management system (LMS). The LMS provides one location for students to easily access course syllabi and readings; receive and submit assignments and projects; complete exams and course evaluations; and interact with classmates and faculty through discussion postings and private mail messages. The online educational environment is password-protected and accessible only to students registered in courses. Outside of the course environment, students communicate with faculty and staff through University e-mail, telephone, fax and mail as needed.

Students can access their course materials anywhere in the world, at any time, as long as the computer they are using has access to the Internet and a web browser. Courses are delivered asynchronously, as contrasted with real-time, and provide students with greater flexibility and convenience than on-campus classes. The degree and certificate programs, however, are not self-paced; the curricula are designed so that students complete courses each quarter and their entire plans of study in a timely manner.

## Minimum Computer System Requirements

The following Guidelines represent the minimum computer system that is required for this program.

Computer	Pentium III or higher
Hard Drive	At least 20 GB
RAM	At least 256 MB, but 512 is recommended
CD-ROM Drive	Yes
Modem	56K cable modem, DSL modem
Sound Card	Yes
Video Card	Yes
Speakers	Yes
Microphone	Optional
Mouse	Yes
Monitor	17 inch or larger
Printer	laser or ink jet

- For those who already own a computer system, this information should help determine if an upgrade of their current system is necessary.
- For those who need to purchase a new system, a state-of-the-art system that fits one's budget is

recommended.

The projected lifespan of computer hardware is probably no longer than three years given the speed with which technology changes. Accordingly, a system that only meets the current minimum computer requirements may become outdated more quickly and may require hardware upgrades sooner than anticipated. Therefore, it is recommended that students purchase the best system they can afford with the hope that it will last throughout enrollment in the program. Please be aware that some of the lower-cost systems have limited upgrade capabilities. Also, note that the purchase price of a computer system can be added to financial aid requests.

### Computer Software Requirements

The following guidelines list the necessary software for this program. Students may be required to upgrade or buy additional software during the course of the program due to the needs of particular courses and the rapid advances in technology.

Software	Software Developer	Purpose
Microsoft Office 2007 Professional or Standard Edition	Microsoft Corporation <a href="http://www.microsoft.com">http://www.microsoft.com</a> <a href="http://www.microsoft.com/office/">http://www.microsoft.com/office/</a> (updates on Office programs)	Word (word processing software) PowerPoint (presentation software) Excel (spreadsheet software)
Norton Antivirus 2009	Symantec Corporation <a href="http://www.symantec.com">http://www.symantec.com</a>	Protects your system from computer viruses
Web Browser and email software		Necessary for accessing D2L. Make sure that all of the security updates available at the Microsoft site are installed.
Adobe Acrobat Reader V 8.0 or higher	Adobe Systems <a href="http://www.adobe.com">http://www.adobe.com</a> (free download)	For reading PDF documents on and offline

### Internet Access

An Internet service provider (ISP) that allows use of Microsoft Internet Explorer is required.

### Contact Information

#### Chair

Susan Tappert, PT, DPT, MS  
(847) 578.8693 / [Susan.Tappert@rosalindfranklin.edu](mailto:Susan.Tappert@rosalindfranklin.edu)

#### Administrative Assistant

Laura Nelson  
(847) 578-3310 / [Laura.Nelson@rosalindfranklin.edu](mailto:Laura.Nelson@rosalindfranklin.edu)

## MASTER OF SCIENCE IN BIOMEDICAL SCIENCES

### Mission

The mission of the Master of Science in Biomedical Sciences program is to prepare students to continue their graduate education in a variety of healthcare professions including allopathic and podiatric medicine, dentistry, healthcare administration & management, nutrition, physical therapy, 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: clinical bioanalysis, healthcare administration & management, health professions education, nutrition, and women's health.

### Curriculum

This challenging one-year course of study includes a number of graduate-level courses in the basic medical sciences and the choice of educational concentration tracks leading to certificates in a variety of healthcare fields. Students in this unique program take classes with students in other degree programs, including various graduate programs, allopathic and podiatric medicine, nutrition, physical therapy, and physician assistant studies.

All students in the Biomedical Sciences program are required to take the series of core courses. In addition, at the time of acceptance, students are required to select one of the following four certificate tracks in which to take courses.

- Clinical Bioanalysis
- Healthcare Administration and Management
- Health Professions Education
- Nutrition\*
- Women's Health\*

An effort will be made to place students in the track of their choice. The Department of Interprofessional Healthcare Studies reserves the right to place students in a track as space allows. Students who receive a 3.0 grade point average in the certificate courses will receive a certificate in the area of concentration.

\*Acceptance into these certificate tracks will be based on a student's qualification and interest, and upon available space in the program. A separate application process is required for students interested in these tracks.

### Admission Requirements

Students seeking admission to the Master's in Biomedical Sciences Program must have earned a baccalaureate degree or its equivalent from an accredited university or college. Applicants must have successfully completed (with a grade of "C" or better) at least one academic year in each of the following subjects, including laboratory sections: 1) biology or zoology; 2) inorganic chemistry; 3) organic chemistry; and 4) physics. The following coursework is highly recommended, but not required: biochemistry, human anatomy, molecular biology, physiology and statistics. Applicants are selected on the basis of previous academic work, adequate preparation in biological and physical sciences, either DAT, GRE or MCAT scores, recommendations from persons involved in the students' previous educational experience, and other factors as determined by the

Admissions Committee and program faculty.

### Requirements for Degree Completion

Successful completion of 49.5 credit hours of core and track coursework (52.5 with the Nutrition track)

Recommendation to the Board of Trustee by the faculty of the department via the Dean of the College of Health Professions, via the President of the University.

### Requirements for Certificate

3.0 average in the four (4) track courses

### Application Information

Applications are available through the Office of Graduate Admissions at the following site:

[www.rosalindfranklin.edu/dnn/administration/administration/Admissions/CHP/tabid/1644/Default.aspx](http://www.rosalindfranklin.edu/dnn/administration/administration/Admissions/CHP/tabid/1644/Default.aspx).

Applications are due June 15<sup>th</sup>. The program begins in the fall quarter.

### Financial Aid Information

Individuals who wish to apply for financial aid should ensure that their graduate program applications are submitted well before the enrollment deadline to allow adequate time for document processing.

Applications for federal student aid are available online at: <http://www.fafsa.ed.gov> and are available every February for the following academic year. The code for Rosalind Franklin University of Medicine and Science is 001659.

### BMS Program of Study

Quarter Track	Course	Credits	Location
<b>Fall</b>			
All Students	*Clinical Molecular Cell Biology	5	On Campus
	*Medical Biochemistry	4	On Campus
	*Medical Physiology	1	On Campus
	*Introduction to Healthcare	1	On Campus
HCAM Track (1 course)	Healthcare Law <i>or</i> Strategic Planning in Healthcare <i>or</i>	3	On Line
	Financial Management <i>or</i>	3	On Line
	Practice Management	3	On Line
		3	On Line
Health Professions Education	Learning Theories	3	On Line
Nutrition Track	Evaluating Research	4	On Line
Women's Health Track	Interprofessional Approach to Women's Health	3	On Line
<b>Total Credits</b>		<b>14</b>	
<b>Clinical Bioanalysis</b>		<b>11</b>	
<b>Nutrition</b>		<b>15</b>	

**BMS Program of Study**

<b>Quarter Track</b>	<b>Course</b>	<b>Credits</b>	<b>Location</b>
<b>Winter</b>			
All Students	*Medical Physiology	9	On Campus
	*Medical Biochemistry	1	On Campus
	*Medical Neuroscience	0.5	On Campus
	*Topics in Physiology	2	On Campus
Clinical Bioanalysis	Laboratory Skill Utilization - Lecture	3	On Line
	Laboratory Skill Utilization - Laboratory	3	On Campus
HCAM Track (2 courses)	Healthcare Delivery Systems <i>or</i>	3	On Line
	Marketing Health Care <i>or</i>	3	On Line
	Management Ethics	3	On Line
Health Professions Education	Course Development	3	On Line
	Classroom Assessment	3	On Line
Nutrition Track	Carbohydrate and Lipid Metabolism	4	On Line
Women's Health Track	Women's Relationship Issues	3	On Line
	Evidence-Based Practice	3	On Line
<b>Total Credits</b>		<b>18.5</b>	
<b>Nutrition Credits</b>		<b>16.5</b>	
<b>Spring</b>			
All Students	*Medical Neuroscience	7	On Campus
	*Medical Biochemistry	1	On Campus
	*Medical Physiology	4	On Campus
	*Topics in Physiology	2	On Campus
Clinical Bioanalysis	Molecular Diagnostics - Lecture	3	On Line
	Molecular Diagnostics - Laboratory	3	On Campus
HCAM Track (1 course)	Organizational Behavior & Human Resources <i>and/or</i>	3	On Line
	Healthcare Informatics <i>and/or</i>	3	On Line
	Cultural Diversity and the Management of Healthcare	3	On Line
Health Professions Education	Instructional Presentation	3	On Line
Nutrition Track	Protein and Energy Metabolism <i>and</i>	4	On Line
	Nutrition Through the Life Cycle	3	On Line
Women's Health Track	Physiology for Women's Health	3	On Line
<b>Total Credits</b>		<b>17</b>	

## BMS Program of Study

Quarter Track	Course	Credits	Location
	Clinical Bioanalysis	20	
	Nutrition Credits	21	

To earn a certificate in the Healthcare Administration and Management track, students must take four of the nine courses (3 quarter hours per course) offered in this program. To earn a certificate in the Clinical Bioanalysis track, the Health Professions Education track, the Nutrition track, or the Women's Health track, students must take all four courses offered in the program.

### CERTIFICATE TRACKS

#### Clinical Bioanalysis:

The Certificate in Clinical Bioanalysis introduces healthcare students to basic skills needed to function in research and clinical laboratory settings. Students will apply their knowledge of molecular biology to clinical diagnostics and practice techniques relevant to clinical molecular biology. The program includes both lecture and laboratory components.

#### Health Professions Education:

The Health Professions Education Certificate is a distance learning (online) program designed for self-motivated experienced healthcare professionals and healthcare students wishing to expand their knowledge of education theory and to become a leader in educating healthcare professionals.

#### Healthcare Administration & Management:

The Certificate Program in Healthcare Administration & Management is a series of online courses geared toward those seeking to advance their knowledge of healthcare administration on select topics. Courses are selected by the student in consultation with the program director.

#### Nutrition:

The certificate in Nutrition is a sequence of 4 online courses, which include content in human and clinical nutrition as well as carbohydrate, lipid, protein and energy metabolism.

#### Women's Health:

The certificate program in Women's Health involves online coursework aimed at increasing the student's understanding of the physiological basis of gender differences in normal and pathological conditions. Students in the RFUMS Biomedical Sciences program and those who have United States certification, registration or licensure as a nurse, registered dietician, occupational therapist, physical therapist, physician assistant, or psychologist may qualify for acceptance into the Women's Health certificate track.

## COURSE DESCRIPTIONS

### REQUIRED CORE COURSES

#### **HIPS 502 Introduction to Interprofessional Healthcare**

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.

#### **MBCH 502 Clinical Molecular Cellular Biology**

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, and related to their morphological appearance.

#### **MPHY 500 A, B, C Medical Physiology**

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.

#### **MBCH 505 A, B, C Medical Biochemistry**

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. Original literature is discussed in conference groups.

The purpose of these courses is to provide state of the art knowledge about the physiological basis to understanding numerous pathophysiological situations in humans.

#### **GPHY 522 A, B Topics in Physiology**

The purpose of these courses is to provide state of the art knowledge about the physiological basis to understanding numerous pathophysiological situations in humans.

#### **MNSC 501 A, B Medical Neuroscience**

This course, designed for both medical and graduate students, provides a broad introduction to modern neuroscience, emphasizing cellular neuroscience, including the neurochemistry of transmitters and receptor function; systems neuroscience, encompassing sensory, motor, affect, memory, language and other higher cognitive functions; neuroanatomy, taught using a combination of human brain atlases, realistic models, cadaver brains and interactive computer programs; and clinical neuroscience, focusing on the neural basis of several major neurological and psychiatric disorders.

### CLINICAL BIOANALYSIS TRACK

#### **HMTC 320 & HMTC 320L Laboratory Skill Utilization (Lecture, and Laboratory,)**

In this course students will refine their microscopy and pipetting skills along with laboratory mathematics, quality control and statistics. Laboratory safety and phlebotomy will be introduced as well as medical ethics and regulations governing medical laboratories. Laboratory testing in clinical hematology, coagulation, chemistry, immunology, immunohematology, microbiology, urinalysis, and body fluid analysis will be covered with laboratory exercises in both clinical and research methodologies included.

#### **HMTC 380 & HMTC 380L Molecular Diagnostics (Lecture, and Laboratory,)**

This course is designed to provide the student with a basic understanding of the principles of molecular biology, molecular diagnostic techniques, and clinical applications of molecular diagnostics. Students will practice DNA extraction, PCR, and other techniques

used in a molecular biology laboratory.

### **HEALTHCARE ADMINISTRATION AND MANAGEMENT TRACK**

(Students, in consultation with program chair, select 4 of the following 10 courses)

#### **HHCM 515 Healthcare Law**

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 525 Strategic Planning and Leadership in Healthcare**

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 Financial Management in Healthcare**

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 provided an historical perspective of financial management in healthcare, 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 522 Healthcare Delivery Systems**

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. 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 discussed. The concepts of cost, access, and quality will be threaded throughout the course.

#### **HHCM 508 Marketing Health Care**

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 519 Practice Management**

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 524 Organizational Behavior and Human Resources**

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 OB 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 HR 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 507 Healthcare Informatics**

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: insuring 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 517 Management Ethics**

The curriculum 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 520 Cultural Diversity and the Management of Healthcare**

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 healthcare can use to diminish the conflict that patients may experience between their traditions related to cultural heritage and the American healthcare system.

## **NUTRITION TRACK**

### **HNUT 555 Nutrition Through the Life Cycle**

An in-depth review of the theory and application of the nutritional requirements and concerns of people during the different stages of the life cycle

### **HNUT 550 Carbohydrate and Lipid Metabolism**

An in-depth study of carbohydrate and lipid

metabolism and their integration in the fed, fasted, and refeed states and to major disease processes.

### **HNUT 551 Protein and Energy Metabolism**

A continuation of the topics presented in NUTR 550 Carbohydrate and Lipid Metabolism, starting with protein metabolism and ending with an overview of energy metabolism. Topics to be addressed include protein structure, function, and quality; general properties, kinetics, and mechanisms of action of enzymes; integration of metabolism and the provision of tissue fuels during the fed, fasted, starved, and hypermetabolic states; and the regulation of food intake, body weight/ composition and energy metabolism. The latter covers the key components of energy expenditure and methods of measurement.

### **HNUT 580 Evaluating Research 4 q.h.**

An introductory graduate course covering fundamentals of the research process with the desired end result being the ability to critically analyze and interpret published research.

## **WOMEN'S HEALTH TRACK**

### **HWHS 500 Interprofessional Approach to Women's Health**

This course provides an overview of the degree program in women's health. It emphasizes the Rosalind Franklin University of Medicine and Science "Model of Collaborative Care" through a focus on an inter-professional approach to health care delivery.

### **HWHS 505 Physiology for Women's Health**

This course will address normal physiology and pathophysiology of particular concern to women using evidence based, case study approach using current literature and research. Emphasis is on issues of particular concern to women, such as endocrine and reproductive health, cardiovascular health, and life stages.

### **HWHS 602 Women's Relationship Issues**

This integrative course reviews the nature and function of women's relationships with particular focus on how these relationships impact women's health. Topics include care-giving roles, domestic violence, and marital functioning.

### **HWHS 510 Evidence-based Practice**

This course is an introduction to the utilization of "best evidence" in the practice of healthcare. After covering the development of clinical questions, the course moves into methods used to identify databases and the use of searching strategies to find evidence. Finally, it covers the application of evidence in the clinical practice setting.

## **HEALTH PROFESSIONS EDUCATION TRACK**

### **HHPE 510 Learning Theories**

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 environment. 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 a philosophy on interprofessional education.

### **HHPE 535 Course Development**

Students will apply curriculum design techniques to design a course in an area of their 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 512 Instructional Presentation Skills**

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 540 Classroom Assessment**

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.

Course descriptions are subject to change without prior notice.

#### **Contact Information:**

##### **Director**

Gordon Pullen, PhD  
(847) 578.8603  
[Gordon.Pullen@rosalindfranklin.edu](mailto:Gordon.Pullen@rosalindfranklin.edu)

##### **Administrative Assistant**

Tamera Kavouras  
(847) 578-8604  
[Tamera.Kavouras@rosalindfranklin.edu](mailto:Tamera.Kavouras@rosalindfranklin.edu)

## **ADVANCED MASTER OF SCIENCE IN CLINICAL LABORATORY SCIENCE**

The Advanced Master of Clinical Laboratory Science is a traditional post-professional graduate degree designed to enable the certified medical technologist or science major to improve his/her professional competence and to develop his/her capacity for both continuing and self-directed study in specialized areas of the clinical laboratory. Thesis and non-thesis options are available. This course of study is offered primarily online and on a part-time basis so the student may continue full-time employment.

### **Admission Requirements**

- Bachelor's Degree (from an accredited institution)
- Certified Medical Laboratory Scientist (ASCP)
- Cumulative Grade Point Average of 2.5 with science G.P.A. of 2.8 (on an undergraduate scale of 4.0)
- Minimum 1 year work experience as an MLS (recommended)
- TOEFL Exam if applicant is from a country where English is not the native language and who have not attended an American college or university full time for two consecutive years.
- International transcripts must be evaluated by an approved U.S. evaluation agency
- International students are requested to take the GRE to include the biology Subject Exam.

### **Graduation Requirements**

- A minimum of 42 quarter hours
- B (3.0) Grade Point Average
- No more than 9 quarter hours of graduate credit may be transferred from another program.
- Credit transfer is dependent upon Departmental approval.

### **Application Procedure**

- Download the application packet
- Submission of official transcripts from all universities and colleges attended.
- Submission of copy of diploma and copy of MT or CLS certification.
- Two letters of recommendation.
- An interview may be required once the application file is complete.

### **Curriculum**

Most classes are conducted in the online environment, so that the working technologist may continue full-time employment. While the courses are asynchronous, the students are still expected to finish a course within the quarter it is offered. The degree must be completed within 5 years.

## Required Courses Thesis Option

Core Courses	9 q.h.
Thesis Courses	13 q.h.
Minimum of one leadership elective	3 q.h.
Minimum of one education elective	3 q.h.
Minimum of one ethics elective	3 q.h.
Other electives	11 q.h.

## Required Courses Non-Thesis Option

Core Courses	9 q.h.
Thesis Courses	6 q.h.
Minimum of one leadership elective	3 q.h.
Minimum of one education elective	3 q.h.
Minimum of one ethics elective	3 q.h.
Other electives	18 q.h.

## GRADUATE COURSE DESCRIPTIONS

### Core Courses

#### HHCM 509 Statistics for Healthcare Administrators & Managers

This course will provide basic principles of general statistical analysis, presentation and application of data, as well as health information statistics specific to healthcare facilities and the analysis, presentation, reporting and application of this data.

#### HNUT 504 Information Literacy for Health Professionals 3 q.h.

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 (offered fall quarter).

#### HNUT 505 Professional Communication 3 q.h.

This course provides you with the skills and techniques to improve the effectiveness of your professional presentations in different health professional settings with an emphasis on different methods to organize a speech, speaking techniques, and development of effective PowerPoint and poster presentations.

**Thesis Courses** (must be taken in sequence; adjacent courses may be taken concurrently.)

#### HCLS 690 Research Methodologies 3 q.h.

An introduction to the research process will be presented with the opportunity to develop a research proposal.

#### HCLS 691 Proposal Development 1 q.h.

Students will prepare a research proposal and an Institutional review board application for their selected thesis. They will assure that all proposed research for their thesis will comply with HIPAA regulations. Prerequisite: HCLS 690 Research Methodologies.

#### HCLS 692 Literature Review 2 q.h.

Students will maintain a working bibliography while conducting a detailed literature search of background information for their thesis topic.

#### HCLS 693 Methods Development 2 q.h.

Students will further develop their research tools and assemble the materials and methods section of their thesis.

#### HCLS 694 Data Collection 2 q.h.

In compliance with HIPAA regulations, students will proceed with the data collection process for their research thesis.

**HCLS 695 Results Analysis 2 q.h.**

Students will complete the analysis of their data, draw conclusions and prepare a discussion of their research findings.

**HCLS 696 Thesis Defense 1 q.h.**

Students will prepare and deliver a thorough presentation of their research thesis and defend their findings before a panel of faculty from the College of Health Professions. Upon approval of the thesis defense, students will have their thesis bound and deliver the required amount of bound copies to the department.

**HCLS 697 Project Presentation 1 q.h.**

Students will prepare and deliver a thorough presentation of their extensive literature review along with suggestions for research that could stem from it.

**Ethics Electives****HCLS 502 Professionalism in Research 3 q.h.**

Through examination and discussion of case studies students will explore the ethics of scientific research including: integrity, mentoring, record keeping, data ownership, conflict of interest and animal and human experimentation.

**HCLS 503 Medical Ethics 3 q.h.**

Through examination and discussion of case studies student will explore medical ethics including: values, principles, justice, autonomy, veracity, fidelity and avoidance of killing.

**Leadership Electives – see Healthcare Administration and Management program course descriptions****HCLS 520 Leadership and Laboratory Management 3 q.h.**

This course is designed to assist the student in developing problem solving skills, personal and interpersonal effectiveness, and appreciation for

others' leadership styles to forge collaborations (i.e. strategic partnering) which are essential to accomplishing the mission and goals of healthcare organizations. Theories of leadership, motivation, power, communication and conflict management will also be examined and applied. The student will be challenged to develop a profile of oneself as a leader and create an action plan for leadership.

**HCLS 524 Evaluating Professional Competence 3 q.h.**

This course is designed to enable you to effectively develop and implement the appropriate skills and tools to evaluate performance of either a student or employee in a clinical laboratory setting.

**HCLS 525 Consulting Skills 3 q.h.**

This course is designed to provide the health care professional with practical skills needed for internal and external consulting. The course will focus on internal consulting covering skills and techniques in contracting, gathering data, preparing feedback, dealing with resistance and negotiating.

**HCLS 618 Current Issues in Laboratory Administration 3 q.h.**

This course will include topics currently faced by the laboratory administrator in the ever-changing healthcare environment. Topics under discussion may include health care reform, OSHA compliance, the American with Disabilities Act, HIPAA compliance, laboratory information management and other current topics. Upon completion of this course the student will be able to analyze the current information and formulate their own strategies for implementing changes in their own laboratory environment.

Students may also take leadership electives from other departments in CHP.

## Education Electives

### **HCLS 530 Teaching Strategies in the Professional Setting 3 q.h.**

This course is designed for students in management and education to aid with planning, implementing and evaluating courses as well as in service programs. It will provide the student with methods and models for design and realistic evaluation models as well as criteria and selection of audiovisual aids.

### **HCLS 531 Creating Self-Instructional Units 3 q.h.**

Students will work through the process for and develop a self-instructional unit in an area of their own interest. Those benefiting from this class include but are not limited to persons responsible for: patient education, allied health students and new employee training. This course itself is presented mostly as an SIU. SIUs produced will be submitted for publication. Prerequisite: HCLS 530 Teaching Strategies.

### **HCLS 532 Designing Simulations for Clinical Education 3 q.h.**

In this course the concepts of simulations and games and their applications to education will be explored. Students will work through the process of designing a simulation in their area of interest.

### **HCLS 560 Clinical Teaching Practicum 3 q.h.**

This course is designed in order to give a student interested in teaching the practical experience. A practicum may be chosen in any of the specialty areas. The student will be required to give lectures and run the concurrent student laboratory sessions. Prerequisite: HNUT 530 Teaching Strategies

Students may also take education electives from other departments in CHP.

## Clinical Laboratory Science Electives

### **HCLS 544 Medical Terminology 3 q.h.**

This is an independent computer assisted course

used to reinforce the advancing language of medical and biological sciences and technology, designed to master the body of knowledge essential to health care professional practice and to communicate effectively with colleagues in various disciplines.

### **HCLS 545 Clinical Laboratory Science for the Health Professional 3 q.h.**

This course aims at providing sufficient technical and clinical information regarding selected hematology, chemistry and microbiology/immunology laboratory procedures to allow the clinician adequate understanding, selection and interpretation skills when addressing these procedures. A series of assigned readings couple with expected objectives and corresponding case studies are utilized throughout to familiarize the student with the interactive diagnostic value of laboratory procedures.

### **HCLS 605 Clinical Pathology Correlation 3 q.h.**

This course is an intensive study of a single disease with significant impact on the total healthcare system, i.e., diabetes mellitus, cardiovascular disease. Student will evaluate current research topics.

### **HCLS 610 Laboratory Safety 3 q.h.**

This course is designed as an update for laboratory personnel and others interested in the current guidelines for medical laboratory safety. Laboratory safety officers and committee members intending to write a certification examination will benefit by this review.

### **HCLS 615 Journal Club 1 q.h.**

This course is designed as a lecture/discussion format. Current topics of the designated area will be selected from approved journals. Student will choose an approved topic, do the necessary library research, and arrange a presentation complete with a lecture outline and references.

**HMTC 380 and HMTC 380L Molecular Diagnostics (Lecture and Laboratory components) 6 q.h.**

This course is designed to provide the student with a basic understanding of the principles of molecular biology, molecular diagnostic techniques, and clinical applications of molecular diagnostics. Students will practice DNA extraction, PCR, and other techniques used in a molecular biology laboratory.

**HCLS 649 Independent Study in Clinical Chemistry 1 q.h.**

This elective course is an independent library research study culminating in a final paper on a topic selected by the student with instructor approval.

**HCLS 650 Morphology of Blood and Bone Marrow Cells 2 q.h.**

This course includes a review of cell maturation, normal and abnormal morphology as well as exploring the technologist's role in bone marrow collection and testing.

**HCLS 651 Blood Cell Morphology – Clinical Correlations 1 q.h.**

This course is a review of peripheral blood cell morphology and correlation with histograms, cytograms and hematologic disorders.

**HCLS 655 Erythrocyte Disorders 3 q.h.**

Quantitative and qualitative evaluation of red cell disorders is examined. This includes the pathogenesis and classification of anemia.

**HCLS 657 Hemoglobinopathies and Thalassemia 3 q.h.**

This course is a review of the differential diagnosis of hemoglobinopathies and thalassemia. Students will interpret laboratory results including hemoglobin electrophoresis patterns.

**HCLS 662 Classification of Leukemia 3 q.h.**

The classification of leukemia is examined integrating morphology, cytochemistry, immunochemistry and

chromosome analysis. Students will work through various case studies.

**HCLS 666 Advanced Concepts in Hemostasis 3 q.h.**

Current theories in hemostasis and thrombosis will be explored along with new diagnostic procedures.

**HCLS 668 Advanced Body Fluid Analysis 3 q.h.**

This course is a study of the analysis of various body fluids excluding routine urinalysis. This includes CSF, synovial fluid, serous fluids and semen analysis. Students may have an opportunity to observe laboratory procedures at a fertility clinic.

**HCLS 669 Independent Study in Hematology 1 q.h.**

This elective course is an independent library research study culminating in a final paper on a topic selected by the student with instructor approval.

**HCLS 670 Clinical Immunology 4 q.h.**

The course is divided into three sections. The first section is a discussion of reactions by the host in response to challenges. It addresses fundamental mechanisms of the immune system, such as antigen recognition, self versus non-self, beneficial specific and non-specific immune responses, tumor surveillance, and hypersensitivity. The second section is an in-depth discussion of antigens and antibodies and their interaction in serologic methods. Specific examples of commonly performed laboratory tests are presented following the general discussion about the method. The final section is a discussion of immunologic diseases in which measuring an immune product or reaction yields significant information for diagnosing and monitoring the disease. The principle and uses of flow cytometry will also be included in this section.

**HCLS 672 Processes in Pathology and Bacteriology 3 q.h.**

The course presents indigenous prokaryotic flora and

pathogens of man in relation to their role in disease. The problems inherent in determining the etiologic agent of infection and investigating the pathogenesis of disease are approached. Areas of concentration will explore the events of infectious disease, host responses (inflammation, immune response) and mechanisms of toxin action to bacterial genetics.

**HCLS 680 Fundamentals of Epidemiology 3 q.h.**

Presentation of concepts and methods of epidemiology as they are applied to a variety of disease problems. Emphasis, as illustrated with studies on specific diseases, will be placed on the integration of biological and statistical elements.

**HCLS 689 Independent Study in Clinical Microbiology 1 q.h.**

This elective course is an independent library research study culminating in a final paper on a topic selected by the student with instructor approval.

**FACULTY**

Lillian A. Mundt, EdD, MLS(ASCP)SH, Associate Professor

Kristy L. Shanahan, MS, CLS(NCA), MT(ASCP), Assistant Professor

## HEALTHCARE ADMINISTRATION AND MANAGEMENT PROGRAMS

### MASTER OF SCIENCE OR CERTIFICATE IN HEALTHCARE ADMINISTRATION AND MANAGEMENT

#### Description of the Program

The *Master of Science Program in Healthcare Administration and Management* is an online educational program that can augment students' clinical education and healthcare professionals' experiences with business acumen to help them better plan for and respond to changes in the healthcare industry. The curriculum, which includes courses such as leadership, evidence-based management, finance, law, marketing, and information management, is designed to equip individuals with the knowledge and skills to integrate best business practice with clinical practice to meet the challenges of a complex healthcare delivery system. The *Certificate Program in Healthcare Administration and Management* is geared toward those seeking to advance their knowledge of healthcare administration and management on select topics.

#### Goals

The purpose of this program is to prepare students to become future leaders in the healthcare industry. To achieve this goal, the students' educational experience will:

- Enhance multidisciplinary administration and management skills;
- Foster the desire and skill to engage in the clinical inquiry process;
- Assist students in developing a depth of knowledge, skill, and investigative attitude toward research, business, and leadership expertise;
- Enhance the ability to engage in self-directed, life-long learning;
- Prepare the graduate for leadership roles in the clinical setting.

#### Unique Feature of the Program

The program offers students an individualized plan of studies that reflects their specific educational needs and culminates in a graduate degree or certificate.

- Distance education format accommodates students' schedules.
- No real-time or on-campus requirements; virtual classroom discussions occur asynchronously — that is, students participate in ongoing interactions with faculty and classmates anytime, any place.
- Student orientation and training to the program and online learning.
- Innovative teaching strategies that assist students with their development as leaders in healthcare.
- Committed faculty who are experts in their field and are experienced in distance teaching/learning methodologies.
- Student-to-faculty ratio optimized for effective online learning.
- Ongoing, individualized guidance and counseling to assist the student in meeting his/her educational goals.
- Final portfolio to synthesize and apply the educational experience.
- Graduate degree can be completed in two years at part-time enrollment, four quarters at full-time enrollment.

#### Admission Requirements

The following are required for admission into the Master of Science and Certificate in Healthcare Management:

- Bachelor's degree from an accredited university or college in any discipline
- Cumulative minimum grade point average of 2.75 on a 4.0 scale.
- Work experience in a related health or science field (recommended, but not required)
- Submission of a completed application, nonrefundable application fee, and two letters of recommendation from persons involved in previous or current educational and/or work experience, whichever is more extensive and recent
- Official transcripts submitted from each college, university, and community college previously attended. International transcripts must be evaluated by an approved U.S. evaluation agency (e.g., World Education Service, Inc. P.O. Box 5087, Bowling Green Station, New York, NY 10274-5087).
- Proficiency in written and verbal English. A 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 exam.
- Students currently enrolled in other programs at Rosalind Franklin University of Medicine and Science should contact the CHP admissions office for an alternative application form and requirements.

### Requirements for Degree Completion

- Successful completion of 42 quarter hours:\* \*(equivalent to 28 semester hours)
- 33 quarter hours of core courses
- 6 quarter hours of electives
- 3 quarter hours of final portfolio course
- Cumulative grade point average of 3.0 (B) or better
- Successful completion of all course requirements within 5 years from the date of enrollment

\*A quarter hour is equivalent to 2/3 of a semester hour.

Up to 9 quarter hours of graduate-level coursework may be transferred into the program at the discretion of the department faculty. Transfer credit may be allowed for individual courses in which the final grades are "B" or better.

### Requirements for Certificate Completion

- Development of a four-course individualized plan of study in conjunction with the program advisor
- Successful completion of 12 quarter hours

Cumulative grade point average of 3.0 (B) or better

- Successful completion of all certificate requirements within 2 years from the date of enrollment

Courses completed with a grade of B or better are transferable into the master's degree program

### Program Completion

- Full-time schedule required - Completion in 4 quarters
- Part-time schedule-Completion in two years taking two classes each quarter.

## Enrollment Deadline

Although the Fall quarter enrollment is preferred, applications are reviewed on a quarterly basis and students are admitted and enrolled each quarter.

## Enrollment Deadline

Completed applications including transcripts and letters of recommendation must be received by:

- August 1<sup>st</sup> for Fall Quarter
- November 1<sup>st</sup> for Winter Quarter
- February 1<sup>st</sup> for Spring Quarter
- May 1<sup>st</sup> for Summer Quarter

## COURSES

### Core Courses

HHCM 507 Healthcare Informatics (3 q.h.)  
 HHCM 508 Marketing Healthcare (3 q.h.)  
 HHCM 509 Statistics for Healthcare Administrators & Managers (3 q.h.)  
 HHCM 515 Healthcare Law (3 q.h.)  
 HHCM 516 Risk and Quality Management in Healthcare (3 q.h.)  
 HHCM 517 Management Ethics (3 q.h.)  
 HHCM 521 Evidence-based Management (3 q.h.)  
 HHCM 522 Healthcare Delivery Systems (3 q.h.)  
 HHCM 524 Organizational Behavior and Human Resources (3 q.h.)  
 HHCM 525 Strategic Planning and Leadership in Healthcare (3 q.h.)  
 HHCM 551 Financial Management in Healthcare (3 q.h.)

### Elective Courses

HNUT 504 Information Literacy for Healthcare Professionals (3 q.h.)  
 HHCM 518 Insurance Dimensions (3 q.h.)  
 HHCM 519 Practice Management (3 q.h.)  
 HHCM 520 Cultural Diversity and the Management of Healthcare Services (3 q.h.)

HHCM 523 Current Topics in Healthcare Administration and Management (3 q.h.)  
 HHCM 552 Independent Study (1-6 q.h.)

Other elective courses may be offered each quarter.

Contact Program Director regarding approval of these courses as electives prior to registration.

### Capstone Experience

HHCM 590 Final Portfolio

## COURSE DESCRIPTIONS

### Core Courses

#### HHCM 507 Healthcare Informatics

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: insuring 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**

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 509 Statistics for Healthcare Administrators & Managers**

This course will provide basic principles of general statistical analysis, presentation and application of data, as well as health information statistics specific to healthcare facilities and the analysis, presentation, reporting and application of this data.

### **HHCM 515 Healthcare Law**

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**

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 assure that standards are met and to optimize the quality of health-care . 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**

The curriculum 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 521 Evidence Based Management**

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 Delivery Systems**

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. 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 discussed. The concepts of cost, access, and quality will be threaded throughout the course.

### **HHCM 524 Organizational Behavior and Human Resources**

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 OB 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 HR 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**

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 550 Strategic Planning in Healthcare**

This course is intended to introduce the student to strategic planning in healthcare organizations. 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. In addition to application of the elements to a variety of healthcare situations, students will have the opportunity to apply this process to their own educational plan for personal academic success.

### **HHCM 551 Financial Management in Healthcare**

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 provided an historical perspective of financial management in healthcare, 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.

### **Elective Courses**

#### **HHCM 518 Insurance Dimensions**

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 policy as they relate to the healthcare insurance industry will also be explored.

### **HHCM 519 Practice Management**

Practice Management offers the essential elements and support for a successful 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 Services**

This course introduces the student to the importance of providing culturally appropriate healthcare services 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 managers of healthcare facilities and providers can use to diminish the conflict that patients and staff may experience when traditions related to the patient's cultural heritage clash with the American healthcare delivery system.

### **HHCM 523 Current Topics in Healthcare Administration and Management**

Health care 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 552 Independent Study**

The independent study is an individualized learning experience designed to meet specific educational needs of the student.

#### **HNUT 504 Critical Skills for Online Learning**

This course introduces the student to Internet browsing software. Skills emphasized include "surfing" the Internet, evaluating World Wide Web sites, basic Web site design, and development, completing effective Internet and online literature database searches, and reviewing and evaluating nutrition and health-related Web sites.

#### **HNUT 504 Critical Skills for Online Learning**

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.

### **Capstone Option**

#### **HHCM 590 Final Portfolio**

The purpose of the final portfolio is for the Healthcare Administration and Management 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 demonstrate proficiency of competencies learned. The student will make a formal PowerPoint presentation to faculty.

## Part-time Schedule – Completion in 2 Years

### Year 1

#### Fall Quarter

HHCM 525 Strategic Planning and  
Leadership Healthcare  
HHCM 515 Healthcare Law

#### Winter Quarter

HHCM 509 Statistics for Healthcare Administrators  
& Managers  
HHCM 522 Healthcare Delivery Systems  
Elective\*

#### Spring Quarter

HHCM 507 Healthcare Informatics  
HHCM 524 Organizational Behavior and Human  
Resources

#### Summer Quarter

HHCM 506 Evidence-based Management  
Elective(s)

### Year 2

#### Fall Quarter

HHCM 551 Financial Management in Healthcare  
Elective\*

#### Winter Quarter

HHCM 508 Marketing Healthcare  
HHCM 517 Management Ethics  
Elective\*

#### Spring Quarter

HHCM 516 Risk and Quality Management in  
Healthcare  
Elective\*

## Summer Quarter

HHCM 590 Final Portfolio  
Elective(s)

\*The final portfolio can be completed during any  
quarter after all courses have been completed.

\*\* Two electives are required for degree completion.

## Full-time Schedule – Completion in 4 Quarters

### Fall Quarter

HHCM 515 Healthcare Law  
HHCM 525 Strategic Planning and  
Leadership Healthcare  
HHCM 551 Financial Management in Healthcare  
Elective\*

### Winter Quarter

HHCM 508 Marketing Healthcare  
HHCM 509 Statistics for Healthcare Administrators &  
Managers  
HHCM 517 Management Ethics  
HHCM 522 Healthcare Delivery Systems

### Spring Quarter

HHCM 507 Healthcare Informatics  
HHCM 516 Risk and Quality Management  
HHCM 524 Organizational Behavior and Human  
Resources  
Elective

### Summer Quarter

HHCM 521 Evidence-based Management  
HHCM 590 Final Portfolio

## Contact Information

Program Director  
Diane Bridges, MSN, RN, CCM  
Assistant Professor  
(847) 578-8479  
[Diane.Bridges@rosalindfranklin.edu](mailto:Diane.Bridges@rosalindfranklin.edu)

**Faculty Member**

Catherine Gierman-Riblon, Med, RN

Assistant Professor

(847) 578-8789

[Catherine.GiermanRiblon@rosalindfranklin.edu](mailto:Catherine.GiermanRiblon@rosalindfranklin.edu)

**Administrative Assistant**

Laura Nelson

(847) 578-3310

[Laura.Nelson@rosalindfranklin.edu](mailto:Laura.Nelson@rosalindfranklin.edu)

## HEALTH PROFESSIONS EDUCATION PROGRAMS

### MASTER OF SCIENCE OR CERTIFICATE IN HEALTH PROFESSIONS EDUCATION

#### Description of Program

The Master of Science in Health Professions Education program provides healthcare professionals with the skills necessary for training the next generation of healthcare practitioners. The Health Professions Education Certificate program provides practitioners or students in the healthcare professions with an opportunity to begin developing skills necessary for training the next generation of healthcare practitioners. These primarily online programs are designed for self-motivated students in any area of healthcare including, but not limited to clinical laboratory scientists, dietitians, massage therapists and other complimentary care practitioners, medical, dental and podiatric physicians, nurses, nutritionists, occupational and physical therapists, pharmacists, psychologists, pathologists' and physician assistants, radiation physicists, and respiratory therapists.

#### Objective of Master of Science Program

The overall objective of the Master of Science in Health Professions Education program is to provide the healthcare system with qualified educators.

#### Student Learning Objectives

Following the completion of the Master of Science in Health Professions Education program the graduate should be able:

1. Integrate learning style information and material presentation methods to facilitate student learning of health profession subject matter
2. Design curricula based on assessment of student learning needs and professional accreditation requirements
3. Evaluate information regarding student performance and program outcomes assessment
4. Integrate educational leadership and evidence based education principles to become a leader in the health profession educational environment

#### Objective of Certificate Program

The overall objective of the Health Professions Education Certificate program is to provide the healthcare system with practitioners who are interested developing skills as educators.

#### Student Learning Objectives

Following the completion of the Health Professions Education Certificate the graduate should be able to:

1. Adjust instruction to various learning styles, reflecting sound adult learning theory.
2. Develop a course or module of study in an area of healthcare expertise.
3. Assess student performance in the classroom.
4. Suggest research designs that will provide supportive evidence for best practices

### Types of Students

Students for the Master of Science in Health Professions Education program must have a minimum of a Bachelor's degree and be licensed, registered or certified, in the United States, in a healthcare profession, or be concurrently enrolled in a professional program in an regionally accredited college or university.

### Admission Requirements

- Baccalaureate degree from a regionally accredited college or university
- United States certification, registration or licensure as healthcare professional
- International transcripts must be evaluated by an approved U.S. evaluation agency.
- Proficiency in written and verbal English. Official results of the Test of English as a Foreign Language (TOEFL), if your native language is not English.

#### OR

- Baccalaureate degree from a regionally accredited college or university
- Be a student in good standing with a minimum grade point average (GPA) of 2.75 in a professional program at a regionally accredited college or university.
- International transcripts must be evaluated by an approved U.S. evaluation agency.
- Proficiency in written and verbal English. Official results of the Test of English as a Foreign Language (TOEFL), if your native language is not English.

### Graduation Requirements Master's Degree

- Successful completion of 45 quarter hours of required coursework (Courses must fulfill all four competencies)
- Successful completion of a Masters Portfolio
- Minimum cumulative GPA of 3.0
- Be in good standing with regard to financial commitment and professional integrity

### Graduation Requirements Certificate

- Successful completion of 12 quarter hours of required coursework (one course per objective)
- Minimum cumulative GPA of 3.0

### COURSE DESCRIPTIONS

#### Master of Science in Health Professions Education (required courses designated with \*)

#### Health Professions Education Certificate (required courses are designated with ^)

Recommended course for students with no online learning experiences (may be taken concurrent with first curricular course).

#### HNUT 504 Information Literacy for Health Professionals 3q.h.

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 ( offered fall quarter).

**Objective 1 – Integrate learning style information and material presentation methods to facilitate student learning of health profession subject matter**

**\* ^ HHPE 510 Learning Theories 3 q.h.**

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.

**Prerequisites:** enrollment in program.

**\*HHPE 512 Instructional Presentation Skills 3 q.h.**

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.

**Prerequisites:** HHPE 510, 530

**HHPE 516 Clinical Instruction and Mentoring 3 q.h.**

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.

**Prerequisites:** HHPE 510, 530

**HHPE 520 Educational Trends and Issues 3 q.h.**

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.

**Prerequisites:** HHPE 510

**HHPE 610 Teaching in the Virtual Classroom 3 q.h.**

Students will debate the benefits and drawbacks to online formats of education, explore the use of course management systems to develop virtual classrooms, practice facilitation skills for effective online teaching, and apply curriculum design strategies to online course development. Students will also discuss the use of the online environment in teaching interprofessional courses.

**Prerequisites:** HHPE 510, 530

**HHPE 612 Teaching in the Multi-cultural Classroom**

Students will examine the impact of culture on teaching and learning. Strategies to create and facilitate an effective multi-cultural classroom will be explored, along with discussion of best practices for teaching multi-cultural groups of students.

**Prerequisites:** HHPE 510, 530

**Objective 2 – Design curricula based on assessment of student learning needs and professional accreditation requirements**

**\* HHPE 530 Curriculum Design 3 q.h.**

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.

**Prerequisites:** HHPE 510

**\* ^ HHPE 535 Course Development 3 q.h.**

Students will apply curriculum design techniques to design a course in an area of their 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.

**Prerequisites:** HHPE 510

**HHPE 601 Creating Self-Instructional Units 3 q.h.**

Students will work through the process for and develop a self-instructional unit (SIU) in an area of their own interest. Areas of SIU development may include instruction of health professions students, new employee training, and patient education.

**Prerequisites:** HHPE 510, 530

**HHPE 602 Designing Simulated Learning Activities 3 q.h.**

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.

**Prerequisites:** HHPE 510, 530

**Objective 3 – Evaluate information regarding student performance and program outcomes assessment**

**\* ^ HHPE 540 Classroom Assessment 3 q.h.**

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.

**Prerequisites:** HHPE 510

**HHPE 545 Evaluating Clinical Competence 3 q.h.**

Student 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.

**Prerequisites:** HHPE 510, 530

**\* HHPE 620 Program Evaluation and Accreditation 3 q.h.**

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.

**Prerequisites:** HHPE 510, 530, 540

**Objective 4 – Integrate educational leadership and evidence based education principles to become a leader in the health profession educational environment**

**\*HHPE 560 Managing Change in Educational Organizations 3 q.h.**

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.

**Prerequisites:** HHPE 530

**\* ^ HHPE 580 Research in Education 3 q.h.**

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 multicultural concerns in health professions education.

**Prerequisites:** HHPE 510, 530 or 535, 540

#### **HHPE 640 Funding Education 3 q.h.**

Students will examine the roles of federal, state, and local governments in the funding of education. Topics include budget management, sources of revenue, grants, and financial aid issues.

**Prerequisites:** HHPE 510, HHPE 530

#### **HHPE 645 Ethical Concerns in Education 3 q.h.**

Students will debate case studies that reflect values-based decisions with which educational leaders are faced. Topics may include accessibility of education, codes of conduct, diversity, confidentiality, plagiarism, technology, student-faculty relationships, and interprofessional relationships.

**Prerequisites:** enrollment in program

#### **HHPE 648 Legal Concerns in Education 3 q.h.**

Students will analyze the legal issues prevalent in education. Topics include regulatory issues, Federal and State constituents and laws, privacy of student records, and freedom of speech.

**Prerequisites:** enrollment in program.

#### **HPTH 501 Practical Statistics 3 q.h.**

This course is an introductory graduate course covering basic principles of biometry and applied statistical methods utilizing current computer software.

**Prerequisites:** enrollment in program.

**After completing a minimum of 39 hours of study representing a balance of core competencies, students are required to engage in the following experiences:**

\* **HHPE 680 Teaching Practicum 3 q.h.**

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.

**Prerequisites:** HHPE 510, 512, 530, 535, 560, 580, electives.

#### \* **HHPE 685 Portfolio Presentation 3 q.h.**

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.

**Prerequisites:** HHPE 510, 512, 530, 535, 560, 580, electives.

## WOMEN'S HEALTH PROGRAMS

### MASTER OF SCIENCE OR CERTIFICATE IN WOMEN'S HEALTH

#### Description of the Program

The Master of Science and Certificate programs in Women's Health are online learning programs designed for self-motivated experienced nurses, nutritionists, allopathic and podiatric physicians, occupational and physical therapists, physician assistants, psychologists and other healthcare professionals wishing to expand their knowledge and become a leader in women's health in an interprofessional environment. Course work for the certificate is completed online with no on-campus requirement. The Master of Science program has a flexible on-campus component prior to graduation. The programs are open to healthcare profession students in good standing in the clinical phase of their education.

#### Goals

The overall objective of the Master of Science in Women's Health is to prepare healthcare professionals to assume collaborative leadership roles in Women's health care.

Following the completion of the Master of Science Women's Health program the graduate should be able to:

- Demonstrate collaborative behaviors in an interprofessional healthcare team.
- Integrate normal physiology and pathophysiology development as related to special concerns regarding women's health to improve patient care.
- Propose an integrated plan of care for women patients taking into account information from the various healthcare providers.
- Value evidence based practice and collaborative research within the healthcare professions.
- Provide leadership for the development of an interprofessional women's healthcare team.

The overall goal of the Certificate in Women's Health is to prepare healthcare professionals to practice in a collaborative environment. Following the completion of the Certificate program in Women's Health the graduate should be able to:

- Practice collaborative care in an interprofessional healthcare team.
- Integrate normal physiology and pathophysiology development as related to special concerns regarding women's health to improve patient care.

#### Unique Features of the Program

The program offers students an individualized plan of studies that reflects their specific educational needs and culminates in a graduate degree or certificate. The unique features of these programs are:

- Distance education format accommodates students' schedules.
- Virtual classroom discussions and interaction occurs asynchronously — that is, students participate in ongoing interactions with faculty and classmates anytime, any place.
- No on-campus requirements for the certificate and a flexible on-campus requirement for the Master of Science program.
- Online student orientation and training for the program.
- Innovative teaching strategies that assist students with their development as leaders in women's healthcare.

- Committed faculty who are experts in their field and are experienced in distance teaching/learning methodologies.
- Student-to-faculty ratio optimized for effective online learning.
- Ongoing, individualized guidance and counseling to assist the student in meeting his/her educational goals.
- Choice of final project to synthesize and apply the educational experience.
- Graduate degree can be completed in two years.

### Admission Requirements

- Baccalaureate degree from an accredited college or university.
- Certification, registration or licensure as a medical physician, nurse, nutritionist, occupational therapist, physical therapist, physician assistant, podiatric physician, psychologist or professional healthcare organization.
- Students in good standing in the clinical phase of a medical, nursing, nutrition occupational or physical therapy, physician assistant, podiatry, or clinical psychology program.
- One year of clinical practice — recommended

### Requirements for Degree Completion

- Successful completion of 24 credit hours of required coursework and 12 credit hours of elective coursework.
- Successful completion of a Masters Project (6 quarter hours).
- Minimum cumulative GPA of 3.0
- Recommendation to the Board of Trustees by the faculty of the department via the Dean of the College of Health Professions, via the President of the University.

### Requirements for Certificate Completion

The program for the Certificate in Women's Health is composed of four required courses (12 quarter hours).

#### COURSES

Coursework in the Master of Science and Certificate in Women's Health programs concentrate on an interprofessional approach to the care of women with emphasis on physiology, pathology, pharmacology, nutrition, exercise, and relationships that are relevant to women.

#### Required Courses

HWHS 500 Interprofessional Approach to Women's Health 3 q.h.\*

#### Three of the following 4 courses:

HWHS 501 Physiology and Pathophysiology for Women I	3 q.h.	3
HWHS 502 Physiology and Pathophysiology for Women II	3 q.h.	
HWHS 503 Physiology and Pathophysiology for Women III	3 q.h.	
HWHS 504 Physiology for Women's Health	3 q.h.*	
HWHS 505 Evidence Based Practice	3 q.h.	
HWHS 551 Medical Pharmacology	3 q.h.	
HNUT 571 Sports Nutrition	3 q.h.	
HWHS 620 Master Project	6 q.h.	

**One of the following two courses:**

HHCM 519 Practice Management	3 q.h.
HHCM 520 Cultural Diversity and the Management of Healthcare Services	3 q.h.

**One of the following two courses:**

HWHS 602 Women's Relationship Issues	3 q.h.
HWHS 604 Women Coping with Cancer	3 q.h.

\*required for certificate and MS degree

**Elective Courses**

HWHS 603 Rheumatic Diseases in Women	3 q.h.
HWHS 605 Neurological Diseases in Women	3 q.h.
Healthcare Administration and Management Courses	

**COURSE DESCRIPTIONS****Required Courses****HWHS 500 Interprofessional Approach to Women's Health 3 q.h.\***

This course provides an overview of the degree program in women's health. It emphasizes the Rosalind Franklin University of Medicine and Science Model of Collaborative Care through a focus on an inter-professional approach to health care delivery. Prerequisite: Enrollment in the certificate or Master of Science program.

**HWHS 501, 502 and 503 Physiology and Pathophysiology I, II and III 3 q.h. each**

The Physiology and Pathophysiology series of three courses covers normal physiology and pathophysiology. The first course of the series addresses issues of the cardiovascular system. The second course looks into issues of the gastrointestinal system and metabolism. The third course focuses on endocrine and reproductive physiology. This series of courses emphasizes issues of particular importance to women in different life stages. General pathophysiological mechanisms will be compared to those of special concern to

women's health and well-being. Students will learn to critique and evaluate current treatments for pathophysiological conditions and integrate these principles with basic physiological principles.

Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

**HWHS 504 Physiology for Women's Health 3q.h.**

will address normal physiology and pathophysiology of particular concern to women using evidence based, case study approach using current literature and research. Emphasis is on issues of particular concern to women, such as endocrine and reproductive health, cardiovascular health, and life stages.

**HWHS 505 Evidence Based Practice 3 q.h.**

This course is a broad-based introduction to the utilization of best evidence in the practice of Women's Health. It begins with the development of clinical patient care questions and moves to successful search strategies, ending with the application of the evidence to improving quality care. Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

**HWHS 551 Medical Pharmacology 3 q.h.**

This course focuses on the pharmacological treatment of diseases that are common in women. Special emphasis is placed on blood pressure control, weight management, cardiovascular disease, estrogen use, pulmonary hypertension, arthritis, and depression. This course also reviews Complementary and Alternative Approaches to Medicine. Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

**HNUT 571 Sports Nutrition 3 q.h.**

Focuses on the acute and long term effects of exercise on the function of major organ systems. Emphasis is placed on the cardiorespiratory,

musculoskeletal, and nervous systems.

### **HHCM 519 Practice Management 3 q.h.\*\***

Practice Management offers the essential elements and support for a successful 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 Services 3 q.h.\*\***

This course introduces the student to the importance of providing culturally appropriate healthcare services 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 managers of healthcare facilities and providers can use to diminish the conflict that patients and staff may experience when traditions related to the patient's cultural heritage clash with the American healthcare delivery system.

### **HWHS 602 Women's Relationship Issues 3 q.h.\*\***

This integrative course reviews the nature and function of women's relationships with particular focus on how these relationships impact women's health. Topics include care-giving roles, domestic violence, and marital functioning. Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

### **HWHS 604 Women Coping with Cancer 3 q.h.\*\***

This course focuses on the impact of cancer on women's lives including psychosocial issues and treatment. Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

*\*\* If not taken as a required course, maybe taken as an elective*

### **HWHS 660 Master Project 6 q.h.**

This is a major project including development of a problem statement, objectives for the experience and literature review as well as producing a significant outcome document i.e., textbook chapter(s), course materials, or research paper. Prerequisite: Satisfactory completion of all previous courses in women's health program and approval of faculty advisor.

## **Elective Courses**

### **HWHS 603 Rheumatic Diseases in Women 3 q.h.**

This course will focus on the impact of rheumatological disease on women's lives including chronic fatigue syndrome, fibromyalgia, systemic lupus erythematosus, erosive osteoarthritis, and rheumatoid arthritis. Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

### **HWHS 605 Neurological Diseases in Women 3 q.h.**

This course will focus on the impact of neurological diseases on women's lives including chronic migraines, stroke and dementia. Prerequisite: Satisfactory completion of all previous courses in women's health program or approval of faculty.

### **Healthcare Administration and Management Electives 3 q.h.**

Students may select an appropriate course from the Healthcare Administration and Management course listings. Prerequisite: Satisfactory completion of all

previous courses in women's health program or approval of faculty.

***Course descriptions are subject to change without prior notice.***

**Contact Information****Chair, Program Director**

Susan Tappert, PT, DPT, MS

(847) 578-8693

[susan.tappert@rosalindfranklin.edu](mailto:susan.tappert@rosalindfranklin.edu)

**Faculty**

Sarah Garber, PhD

(847) 578-8577

[Sarah.Garber@rosalindfranklin.edu](mailto:Sarah.Garber@rosalindfranklin.edu)

**Administrative Assistant**

Laura Nelson

(847) 578-3310

[Laura.Nelson@rosalindfranklin.edu](mailto:Laura.Nelson@rosalindfranklin.edu)

## Doctor of Science/Doctor of Philosophy in Interprofessional Studies

### Description of Program

This program is an opportunity for practitioners in various disciplines such as physical therapy, occupational therapy, nutrition, physician assistants, and clinical laboratory sciences to advance their knowledge and skills in collaborative interprofessional practice. Students study part-time on campus and online in an interprofessional curriculum focusing on creating innovative methods to bridge the healthcare professions. The program emphasizes the development of scholarly evidence-based skills to improve healthcare.

**DSc** The capstone experience is a clinical research project of local or national significance.

**PhD** The PhD program is a continuation of the DSc which focuses on theoretical research and culminates in a fundable, publishable quality research project.

### Goals

#### ***Following the completion of the Doctor of Science program graduates will:***

- Practice in an interprofessional manner to model collaborative care
- Use evidence as part of daily clinical decision making
- Use evidence as part of daily clinical decision making
- Provide leadership in the development of an interprofessional healthcare practice environment
- Set and achieve interprofessional goals in practice, education, scholarship and service

#### ***Following the completion of the PhD program graduates will:***

- Practice in an interprofessional manner to model collaborative care
- Use evidence as part of daily clinical decision making
- Engage in scholarly activity
- Provide leadership in the development of an interprofessional healthcare practice environment
- Set and achieve interprofessional goals in practice, education, scholarship and service
- Value collaborative research within the healthcare disciplines
- Engage in collaborative research
- Seek funding for their collaborative research agenda

### Types of Students

Students for the Interprofessional Studies program will be licensed, registered or certified practitioners in physical therapy, occupational therapy, physician assistant studies, nursing, or other healthcare professions.

### Admission Requirements

The following are required for admission into the Doctor of Science and the Doctor of Philosophy programs:

Masters or doctorate degree from an accredited college or university

- 3.0 minimum cumulative grade point average in graduate work
- Licensed, registered, certified or otherwise credentialed healthcare professional in the United States
- Two years experience in their professional discipline is suggested.
- GRE Exam
- TOEFL (If necessary)
- Letters of recommendation

### Requirements for Degree Completion

- Successful completion of 60 quarter hours of coursework beyond the Masters
- Minimum cumulative GPA of 3.0 on a 4.0 scale
- Students must complete the degree in 7 years
- The Interprofessional Studies DSc and PhD require that the students be on campus for a minimum of one full quarter. Flexible arrangements can be made.
- Recommendation to the Board of Trustees by the faculty of the department via the Dean of the College of Health Professions, via the President of the University

### Curricular Components

The Interprofessional Studies program is composed of a research and an interprofessional component with opportunity for electives. The research component includes both coursework (18 quarter hours) and either clinical research (minimum 9 quarter hours) or theoretical research activities (minimum 12 quarter hours). The interprofessional component is composed of coursework (15 quarter hours) and practicum experiences (18 quarter hours). The student may select from a broad array of electives to complete the program (3–12 quarter hours).

### COURSES

#### REQUIRED COURSES

#### RESEARCH COMPONENT:

##### Coursework – 18 q.h.

HIPS 600 Introduction to Doctoral Study	3 q.h.
HIPS 560 Critical Inquiry 1 – Research Design	3 q.h.
HIPS 561 Critical Inquiry 2 – Statistics	3 q.h.
HIPS 562 Measurement Principles	3 q.h.
HIPS 660 Ethics in Research	3 q.h.
HIPS 680 Proposal Development	3 q.h.

#### Research

HIPS 710 DSc – Clinical Research	(Min 9 q.h.)
HIPS 810 PhD – Dissertation Research	(Min 12 q.h.)

#### INTERPROFESSIONAL COMPONENT:

##### Coursework – 15 q.h.

HIPS 501 Introduction to Interprofessional Healthcare Studies	3 q.h.
HIPS 550 Evidence Based Practice	3 q.h.
HIPS 601 Interprofessional Healthcare Seminar	3 q.h.
HHCM 526 Leadership in the Healthcare Environment	3 q.h.
HPTH 619 Principles of Education	3 q.h.

#### Fieldwork – 18 q.h.

HIPS 701 Internship in Interprofessional Education	6 q.h.
HIPS 702 Internship in Interprofessional Service Learning	6 q.h.
HIPS 703 Internship in Interprofessional Healthcare	6 q.h.

#### ELECTIVES:

##### Coursework – 3-12 q.h.

Specialty Healthcare Courses – PT or Other Disciplines  
Healthcare Administration and Management Courses  
Nutrition Courses

#### COURSE DESCRIPTIONS

#### RESEARCH COMPONENT:

##### HIPS 600 Introduction to Doctoral Study 3 q.h.

This course introduces the new graduate student to the importance of critical thinking and the strategies for independent inquiry necessary for doctoral level study. Career patterns and pathways are investigated with emphasis on goal setting. Prerequisite: Admission to the doctoral program.

**HIPS 560 Critical Inquiry 1 – Research Design 3 q.h.**

Students are introduced 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. Prerequisite: Admission to the doctoral program.

**HIPS 561 Critical Inquiry 2 – Statistics 3 q.h.**

This course covers descriptive and inferential statistical procedures with examples of use in the biomedical and clinical sciences. Prerequisite: Successful completion of Critical Inquiry 1.

**HIPS 562 Measurement Principles 3 q.h.**

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. Prerequisites: Successful completion of Critical Inquiry 1 and 2.

**HIPS 660 Ethics in Research 3 q.h.**

This course provides an overview of bioethics and discusses a broad range of potential situations in which a researcher may become involved. Familiarization with the ethical decision making process and developing an appreciation for the ethical challenges of research is included. Prerequisites: Successful completion of Critical Inquiry 1 and 2.

**HIPS 680 Proposal Development 3 q.h.**

Students are guided through the steps necessary for the development of their dissertation proposals. Each student identifies a research problem, develops a research design and suggests methodology for data collection and analysis. Overall, the course lays the groundwork for the completion of the research work and dissertation. Prerequisite: Successful completion of previous research courses.

**HIPS 710 Clinical Research (Min 9 q.h.)**

An individualized clinical research project which involves the identification of an interprofessional clinical problem, review of the literature, data collection and analysis followed by the preparation of a publishable paper. Oral defense is required. Prerequisites: Successful completion of all previous coursework.

**HIPS 810 Dissertation Research (Min 12 q.h.)**

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. Prerequisite: Successful completion of all previous coursework.

**INTERPROFESSIONAL COMPONENT:**

**HIPS 501 Introduction to Interprofessional Healthcare Studies 3 q.h.**

This course sets the stage for interprofessional study by covering the 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. Prerequisites: Admission to the program

**HIPS 550 Evidence Based Practice 3 q.h.**

An introduction to the utilization of best evidence in the practice of healthcare in multiple disciplines. What is considered evidence by different professions is covered. The course begins with the development of interprofessional questions and moves to successful search strategies, ending with the application of the evidence to improving quality of care. Prerequisites: Admission to the program.

**HIPS 601 Interprofessional Healthcare Seminar (var)**

This course is a discussion centered learning experience in which special topics in the area of Interprofessional Studies are considered. Literature is identified and discussed with a recognized expert in the area. The topic will vary by quarter and be a required sequence in the later years of the program. Prerequisites: Successful completion of all coursework.

**HHCM 526 Leadership in the Healthcare Environment 3 q.h.**

Provides the healthcare practitioner with theory and skills in the area of leadership management, communication, motivation, interviewing and legal guidelines. Prerequisites: Admission to the program.

**HPTH 619 Principles of Education 3 q.h.**

A course designed to aid with the planning, implementing and evaluation of interprofessional academic courses. Methods and models for design and evaluation are included. Prerequisites: Admission to the program.

**HIPS 701 Internship in Interprofessional Education 6 q.h.**

An individualized learning experience in which a student participates in a class with an interprofessional student body. The student develops objectives for the experience, a learning plan and a measurement tool for outcomes. Prerequisite: Successful completion of all previous interprofessional coursework.

**HIPS 702 Internship in Interprofessional Service Learning 6 q.h.**

An individualized learning experience in which a student participates in an interprofessional service learning activity. The student develops objectives for the experience, a learning plan and a measurement tool for outcomes. Prerequisite: Successful completion of all previous interprofessional

coursework.

**HIPS 703 Internship in Interprofessional Healthcare 6 q.h.**

An interprofessional learning experience in which a student plans and observes an interprofessional interaction. The student develops objectives for the experience, a learning plan and a measurement tool for outcomes. Prerequisite: Successful completion of all previous interprofessional coursework.

**SCHEDULE**

**Year 1**

**Fall Quarter**

Introduction to Doctoral Studies  
Critical Inquiry I - Research Design

**Winter Quarter**

Introduction to Interprofessional Studies  
Critical Inquiry 2 - Statistics

**Spring Quarter**

Leadership in the Healthcare Environment  
Interprofessional Healthcare Seminar

**Year 2**

**Fall Quarter**

Evidence Based Practice  
Principles of Education

**Winter Quarter**

Measurement Principles  
Internship in Interprofessional Education

**Spring Quarter**

Proposal Development  
Ethics in Research

**Year 3****Fall Quarter**

Interprofessional Healthcare Seminar  
Internship in Interprofessional Service Learning I

**Winter Quarter**

Interprofessional Healthcare Seminar Elective

**Spring Quarter**

Interprofessional Healthcare Seminar Elective

**Year 4****Fall Quarter**

Clinical Research

**Winter Quarter**

Clinical Research

**Spring Quarter**

Clinical Research

**Year 5****Fall Quarter**

Dissertation

**Winter Quarter**

Dissertation

**Spring Quarter**

Dissertation

**Year 6****Fall Quarter**

Dissertation

**Winter Quarter**

Dissertation

**Spring Quarter**

Dissertation

**Faculty**

Susan Tappert, PT, DPT  
Chair

Interprofessional Healthcare Studies

Diane Bridges MSN, RN, CCM,  
Program Director

Healthcare Administration and Management

Gordon Pullen, PhD

Program Director  
Biomedical Sciences

Judith Stoecker, PT, PhD

Program Director  
DSc/PhD in Interprofessional Studies

## DEPARTMENT OF MEDICAL RADIATION PHYSICS

### Mission

The mission of the Medical Radiation Physics MS Program is to provide unsurpassed academic, professional and clinical training. This mission is achieved through the dedication and commitment of faculty as well as the collaboration with our many affiliated clinics in the Chicagoland area.

We recognize the expanding and essential role of technology in our field, and strive to cultivate a progressive program which meets the needs of today's students – tomorrow's professionals. Many of our teaching staff continually attends scientific meetings to stay abreast of state of the art treatments and diagnostics. Some also work in clinics where the most advanced treatment and imaging machines are employed.

We are dedicated to instilling awareness of ethical values, cultural diversity, inter-professional collaboration.

### General Information

The Department of Medical Radiation Physics offers close personal interaction combined with multiple learning and research resources. Students in the MRP program receive clinical experience from several affiliated hospitals in the area. Graduates of our programs have taken lead positions in radiological physics at clinical, research, academic and governmental institutions in the United States and abroad. The growing use of technology and computers in our field makes this profession exciting and promising for future growth.

### Master of Science Program in Medical Radiation Physics

The Masters program concentrates on clinical aspects of medical radiation physics. The Masters degree typically requires two full-time years to complete, which covers seven consecutive academic quarters.

Graduate students pursuing the MS degree in Medical Radiation Physics are required to take all core courses listed in the Medical Radiation Physics MS Program section of the College of Health Professions catalog, including the fulfillment of Clinical Practicum.

### Admission to the MS Program

Applicants seeking to pursue the Master of Science degree offered by the Department of Medical Radiation Physics will be evaluated by the College of Health Professions Committee on the following criteria:

- Baccalaureate Degree from an accredited University or College
- Previous academic achievement, GPA > 3.0/4.0
- General GRE exam scores
- University-level physics and mathematics coursework
- Letters of recommendation
- A personal interview (when possible)
- TOEFL Exam score within the last two years, if you are a foreign applicant who is from a country where English is not the primary language and have not attended a university/college in the U.S. for two consecutive years.
- International transcripts must be evaluated by an approved U.S. credential evaluation agency, such as [wes.org](http://www.wes.org) or [ece.org](http://www.ece.org)

Application materials for the Medical Radiation Physics Master of Science program may be obtained by these avenues:

- Contact the Department of Medical Radiation Physics at 847.578.8322 or
- Contact the Office of Admissions at 847-578-3209 or
- Fill out our **online form** or
- Complete the **Print application**.

**The deadline for completed application files is May 1.**

### **Degree Requirements for Medical Radiation Physics MS Program**

Students will be eligible for a MS degree in Medical Radiation Physics if -they complete all coursework and clinical assignments as required by the department

- Maintain a 'B' or better grade point average
- Pass a written comprehensive exam

### **CORE COURSES OFFERED IN THE MS PROGRAM BY THE DEPARTMENT OF MEDICAL RADIATION PHYSICS**

#### **HMRP 600 and HMRP 700 Basic Radiological Physics 1 & II**

Introductory course in radiological physics; interactions of radiation with matter; concepts and measurements of exposure and dose; clinical applications of radiation in radiation therapy, diagnostic radiology, and nuclear medicine; radiobiology; radiation protection. This course is a prerequisite for most of subsequent radiological physics courses

#### **HMRP 600 3 q.h.**

Fall Quarter, three lecture hours per week.

#### **HMRP 700 3 q.h.**

Winter Quarter, three lecture hours per week.

#### **HMRP 602 Health Physics 3 q.h.**

Health physics related to industry, medical and research applications. Health physics instrumentation and methods used to protect humankind and its environment from unnecessary exposure to radiation.

Fall Quarter

#### **HMRP 602 Radiation Biology 3 q.h.**

Understanding how cells, tissues, and the body as a whole respond to ionizing radiation is important for a comprehension of radiotherapy. This course will discuss the effects of ionizing radiation at the molecular, cellular, tissue, and whole organism level. The effects of repair, reoxygenation, repopulation, and cell cycle redistribution will be discussed. Normal tissue toxicities, including acute and late effects, will be detailed in the course. Discussion will include radiation carcinogenesis, radiation cataractogenesis, low dose effects, the linear non-threshold model for radiation damage. Spring Quarter

#### **HMRP 603 and HMRP 703 Physics of Radiation Oncology I & II**

Concept and measurement of exposure and absorbed dose, radiation therapy machines, energy absorption in biological media, and radiobiological basis of radiation therapy are discussed. Radiation fields within a patient, beam characteristics and modification, dose distributions due to single and multiple fields, implant therapy and therapeutic use of particulate radiations and computerized treatment planning.

#### **HMRP 603 3 q.h.**

Fall Quarter, three lecture hours per week.

**HMRP 703 3 q.h.**

Winter Quarter, three lecture hours per week.

**HMRP 604 Physics of Diagnostic Radiology 5 q.h.**

Presents the application of radiological physics to specific techniques and problems in the physics of diagnostic radiology. Production and interactions of X-rays; X-ray equipment, imaging systems; image quality; computerized axial tomography; design and survey of radiographic installations; testing and acceptance of radiographic equipment, patient protection. This course is a prerequisite for a clinical practicum in the physics of diagnostic radiology. Fall Quarter

**HMRP 605 Physics of Nuclear Medicine 3 q.h.**

Review of the basic physics of radioactivity; artificial productions of radio-nuclides; instrumentation and laboratory methods; basic considerations for medical applications of radioactive materials. Fall Quarter,

**HMRP 606 Biomedical Instrumentation 3 q.h.**

This course provides an introduction to instrumentation electronics. This includes: sensor devices, transistor, semiconductor and integrated circuit components as applied to related biomedical instrumentation; quantitative presentation of electrical circuit theory employed in instrumentation circuitry; related instrumentation applications in biology and medicine.

**HMRP 607 Introduction to the Oncology Clinic 2 q.h. each quarter**

This two-quarter class is intended as an introduction to the Modern Radiation Oncology Clinic. Students will be prepared for their clinical rotations which begin in the spring quarter. Clinical Sites: Lutheran General Hospital, Alexian Brothers Medical Center, Good Samaritan Hospital, Christ Hospital. Fall and Winter Quarters

**HMRP 609 Radiation Oncology 3 q.h.**

Principles and practice of radiation oncology, clinical background pertinent to the justification and understanding of the technique of radiation therapy. Treatment planning with Co-60 as well as high energy photon and electron beams. Radiotherapy alone and in combination with surgery and chemotherapy. Spring Quarter

**HMRP 613 Independent Study 1 – 3 q.h.**

Independent, directed readings in areas of medical physics not covered by any formal departmental course offerings may be arranged. Such independent study may also be used in preparation for thesis research. Hours and units of credit to be arranged. Offered as required.

**HMRP 615 Departmental Seminar 1 q.h.**

The Medical Radiation Physics faculty meet regularly to discuss problems of current interest. Guest speakers are invited. Participation in the seminars is required. A total of at least two Departmental Seminars is required for graduate students in the Medical Radiation Physics program. Offered as required.

**HMRP 616 Clinical Practicum 3 – 12 q.h. per quarter**

The purpose of the clinical practicum is to give the student clinical experience and exposure to the hospital environment in which the physicist participates. In collaboration with a faculty advisor, the student arranges a rotation schedule in the departments of radiation therapy, diagnostic radiology and nuclear medicine in one or more of a number of affiliated hospitals. During this time the student works full-time under the direct supervision of an experienced clinical physicist. All quarters

### **HMRP 619 and HMRP 620 Essentials of Anatomy and Physiology I & II 3 q.h.**

The course presents an equal balance of basic anatomic and physiologic concepts. It is designed to introduce students pursuing careers in the allied health fields to the structure and function of the human body. Occasional pathologic examples are presented to portray what might be seen clinically when there is malfunction and disease.

#### **HMRP 619 3 q.h.**

Fall Quarter, includes lectures on the following areas: microscopic anatomy, skin, skeletal system, muscular system, nervous system and special senses. 3 lecture hours per week.

#### **HMRP 620 3 q.h.**

Winter Quarter, includes lectures on the following areas: endocrine system, blood, immunology, circulatory system, respiratory system, gastrointestinal system, urinary system and reproductive system. 3 lecture hours per week

### **HMRP 622 Physics of Medical Imaging 4 q.h.**

Presents the physical aspects of various instrumentation and techniques in the field of Medical Imaging Sciences. Review of concepts of production and interaction of radiation with matter; technical and clinical applications of various devices such as X-ray equipment, CT, MRI, that are routinely used in Medical Imaging. Winter Quarter

### **HMRP 623 Introduction to Diagnostic Radiology 2 q.h.**

Covers basic interpretation of X-ray of the chest, abdomen, bony structures, including barium studies of the gastrointestinal tract. Provides students the fundamental physics and interpretation of CT scans of the brain, chest, abdomen and pelvis. MRI will also be introduced along with the introduction to basic ultrasonography, mammography, nuclear medicine, and angiography. Fall Quarter

### **HMRP 625 and HMRP 626 Biochemistry for Medical Physicists I & II**

This two-part course is intended as an introduction to Biochemistry for students in the Medical Radiation Physics Program. The general spectrum of topics is similar to that contained in Introductory Biochemistry but in less detail. The course begins with a preliminary review of organic chemistry nomenclature; emphasis is on the effects of radiation and mutagenic compounds on nucleic acids.

#### **HMRP 625 2 q.h.**

Winter Quarter, two lecture hours per week

#### **HMRP 626 Biochemistry for Medical Physicists II 2 q.h.**

Spring Quarter, two lecture hours per week

### **HMRP 630 Research Thesis**

The optional thesis shall represent a report of original research of sufficiently high scientific quality to be acceptable for publication in the standard journals of the field.

### **HMRP 695 Treatment Planning 3 q.h.**

Treatment planning in radiotherapy has to do with utilizing specialized computers to customize a patient's treatment to fulfill the physician's clinical requirements. Treatment planning computers make use of a variety of imaging modalities such as CT, MRI and PET along with specialized data to calculate the dose to all points within a patient's body. Dose information is overlaid on a patient's anatomy from the different imaging modalities to allow the planner to make decisions about how the radiation will be delivered with the intent of treating the tumor fully while sparing healthy tissue. Winter Quarter

### **HMRP 701 Task Group Protocols 1 q.h.**

This class meets weekly to present and discuss AAPM reports and protocols used in the field of Medical Physics. Active student participation in this class is required. Fall Quarter

### **HMRP 705 Special Topics in Medical Physics 3 q.h. total**

Winter Quarter, 2 sections

Section I - Cross-sectional Anatomy, Alexander Markovic, PhD/Staff This core course in the medical radiation physics curriculum teaches graduate students the basics of CT and MRI cross sectional anatomy. Lectures will deal with concepts of identifying normal and pathologic images, developing a technique of viewing diagnostic images, and contouring potential organs at risk.

Section II - Brachytherapy, Plato Lee, PhD This core course in the medical radiation physics curriculum teaches Medical Physics graduate students the fundamental concepts of Brachytherapy physics and dosimetry. Lectures will cover the history and evolution of Brachytherapy, the terminologies, units and various practices in Brachytherapy Physics and Dosimetry. This course will lead to modern Brachytherapy Physics practices and protocols and AAPM Task Group recommendations and its reports.

### **PERTINENT COURSES OFFERED BY ROSALIND FRANKLIN UNIVERSITY**

#### **HMTD 500 Interprofessional Healthcare Teams 1 q.h. total credit**

*This course is required for every first-year student in a program in the College of Health Professions. This course is an experiential learning opportunity for all students at Rosalind Franklin University of Medicine and Science to learn about a collaborative model of care. The students will interact in health care teams focusing on patient centered care emphasizing evidence-based practice, quality improvement strategies and informatics.*

### **GIGP 508 Ethics & Regulatory Issues in Biomedical Research 2 q.h. Required**

#### **Requirements:**

This course covers most of the major issues related to the responsible conduct of research in the biomedical sciences, including: overt falsification, fabrication, plagiarism (FFP); the official University and Public Health Service procedures for reporting and investigating misconduct; data management; human subject protection; authorship and peer review guidelines; conflict of interest in research; mentor and trainee responsibilities; and guidelines for collaborative research. The course includes a combination of lectures, small group case discussions, and video case discussions. Students are assessed based on attendance, classroom participation, and a final quiz. In addition, students are required to complete additional online components of the course via the CITI website ("Collaborative Institutional Training Initiative"), including certification in animal use, human subject research, and radiation safety. Grade scheme: P/F Winter Quarter

### **GIGP 509 IGPBS Biostatistics 4 q.h. Required Specialty Course**

#### **Requirements:**

Based on the content in HPTH 622 Critical Inquiry, the content of this course has been elaborated upon to bring the following topics more relevance for the bench research student by including discussion groups and exercises in addition to the normal course content. Students are introduced to the elements of thought and the logic of critical thinking. Measurement theory and principles as applied to physical therapy practice and research are studied. The role of the researcher in professional practice is examined. Principles and application of scientific inquiry are emphasized. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty. Grade Scheme – ABCDF Spring Quarter

**Faculty and Associated Staff**

Robert E. Drzymala, PhD, Lecturer  
Kyung Han, PhD, Associate Professor

Tomasz Helenowski, MD, Clinical Associate Professor

Allen Hrejsa, PhD, Adjunct Associate Professor

Dennis Majkowski, Lecturer

Alexander Markovic, PhD, Assistant Professor

Ejaz Rahim, MD, Associate Professor

Paul Schabinger, MD, Associate Professor

Gary Schreiber, MD, Assistant Professor

Ernest Sukowski, PhD, Associate Professor

Brian Tom, PhD, DPhil, Adjunct Assistant Professor

## DEPARTMENT OF NURSE ANESTHESIA

### Professional Definition

Nurse anesthetists have provided anesthesia care in the United States for 125 years. Nurses first provided anesthesia to wounded soldiers during the Civil War. Some 40,000 Certified Registered Nurse Anesthetists (CRNAs) administer approximately 65% of all anesthetics annually in the United States. CRNAs are the sole anesthesia providers in about two thirds of all U.S. rural hospitals, enabling these facilities to provide obstetrical, surgical and trauma stabilization services. According to a 1999 report from the Institute of Medicine, anesthesia care today is nearly 50 times safer than it was 20 years ago. CRNAs provide anesthesia to patients in collaboration with surgeons, anesthesiologists, dentists, podiatrists, and other qualified healthcare professionals. When anesthesia is administered by a nurse anesthetist, it is recognized as the practice of nursing; when administered by an anesthesiologist, it is considered the practice of medicine. As advanced practice nurses, CRNAs practice with a high degree of autonomy and professional respect. They carry a heavy load of responsibility and are compensated accordingly. CRNAs practice in every setting where anesthesia is delivered: traditional hospital surgical suites and obstetrical delivery rooms; critical access hospitals; ambulatory surgical centers; the offices of dentists, podiatrists, ophthalmologists, plastic surgeons, and pain management specialists; the U.S. Military, Public Health Services and Department of Veterans Affairs healthcare facilities.

### Description of the Program

This is a rigorous didactically front-loaded program in nurse anesthesia. The first 12 months entail classroom and laboratory study, combined with human patient simulation and operating room observation. A 15 month clinical practicum follows, where students learn to provide anesthesia care for patients of all acuity levels across the lifespan who are undergoing surgical procedures of varying complexity.

### Goals

The overall objective of the Master of Science in Nurse Anesthesia program is to prepare an advanced practice nurse for a career as a nurse anesthetist with leadership skills. This full-time, 27 month program will develop a reflective practitioner who uses evidence in decision making. Graduates will have competitive entry-level knowledge, skills and abilities in nurse anesthesia practice.

### Mission

The mission of the Nurse Anesthesia Program is to prepare and educate nurse anesthetists to provide high quality advanced practice nurse anesthesia care in a competent, compassionate and ethical manner. The department also promotes research and academic endeavors that contribute to the advancement of the knowledge and education of fellow healthcare professionals and community service.

### Vision

The Nurse Anesthesia Program will prepare and educate graduates who provide safe, competent, compassionate and culturally-appropriate anesthesia care. Graduates will be academic and practice setting leaders.

The Vision will be achieved as follows:

1. Encouraging nurse anesthesia students and graduates to be patient advocates and integral members of

the health care team, meeting the needs of all patients.

2. Promoting research, professional engagement and academic endeavors as part of the process of life-long learning.
3. Providing and encouraging continuing education for colleagues across healthcare disciplines.
4. Promoting community service to meet educational and health care needs of the community.
5. Developing professional leaders in nurse anesthesia, advanced practice nursing, and in the non-physician provider community.

### **Admission Requirements**

- Completion of University and program application materials.
- Submission of all undergraduate and graduate-level transcripts.
- A grade point average (GPA) of 3.0 on a 4 point scale, or higher. Students not meeting the GPA requirement may be admitted conditionally with faculty recommendation.
- Payment of a non-refundable application fee.
- Baccalaureate degree from an accredited college or university.
- Current licensure as a registered professional nurse in the United States, its territories or protectorates.
- At least one year, preferably two, of experience as an RN in an acute intensive care unit setting. This experience should include personally caring for patients with invasive monitoring lines, vasoactive/sedative/analgesic infusions, EKG interpretation, and caring for mechanically ventilated patients.
- Competitive GRE scores.
- Acceptable TOEFL scores for applicants whose primary language is not English.
- A personal statement indicating goals for graduate education in nurse anesthesia.
- Interview with faculty members.
- Three letters of recommendation, one of which must be from a CRNA with whom the applicant has spent time in the operating room observing surgery and anesthesia.
- A current resume.

### **Programmatic Accreditation**

The program was reviewed by the Council on Accreditation of Nurse Anesthesia Educational Programs. The next accreditation review is scheduled for May 2012.

The Council on Accreditation of Nurse Anesthesia Educational Programs

222 S. Prospect Avenue Park Ridge, IL 60068

Phone: 847.692.7050

E-mail: [accreditation@aana.com](mailto:accreditation@aana.com)

### **Application Deadline**

The deadline for complete application files is September 1. Interviews will be held in September and October, and selection decisions will be communicated to applicants by the end of November each year. Applications are accepted for review year round.

## Terminal Learning Objectives

Upon completion of the 27 month Master's Degree Program in Nurse Anesthesia, the graduate should be able to:

- Maintain patient safety.
- Protect patients from iatrogenic complications.
- Position or supervise the positioning of patients to prevent injury.
- Perform a pre-anesthetic assessment and formulate an appropriate anesthesia care plan.
- Use a variety of current anesthesia techniques, agents, adjunctive drugs, and equipment while providing anesthesia.
- Conduct a comprehensive and appropriate equipment check.
- Initiate appropriate action when confronted with anesthetic equipment-related malfunction.
- Provide anesthesia services in emergency cases, including trauma.
- Administer general anesthesia to patients of all ages with varied physical, medical, and surgical conditions.
- Administer and manage a variety of regional anesthetics.
- Interpret and utilize data obtained from invasive and non-invasive monitoring modalities.
- Calculate, initiate, and manage fluid and blood component therapy.
- Recognize and respond appropriately to anesthetic complications that occur during the perioperative period.
- Utilize universal precautions and appropriate infection control measures.
- Function as a resource person for airway and ventilator management of patients.
- Serve as a leader or member of a cardiopulmonary resuscitation team and possess advanced cardiac life support recognition.
- Participate in quality management activities.
- Function within appropriate legal requirements as a registered professional nurse, accepting responsibility for his or her practice.
- Demonstrate personal and professional integrity and the ability to interact on a professional level.

## GRADUATION REQUIREMENTS

### PROGRAM OF STUDY

#### 27 MONTH FULL-TIME TRACK

##### Term 1 Spring

HNAS 750 Physiology & Pathophysiology 6 q.h.

HNAS 701 Principles of Anesthesia I 3 q.h.

HNAS 710 Chemistry & Physics in Anesthesia 3 q.h.

HNAS 711 Clinical Correlations I 1 q.h.

**13 q.h.**

##### Term 2 Summer

HPAS 500 Gross Anatomy 10 q.h.

HNAS 700 Professional Issues and Ethics 2 q.h.

**12 q.h.**

##### Term 3 Autumn

HMTD 500 Interprofessional Healthcare Teams 1 q.h.

HNAS 702 Principles of Anesthesia II 3 q.h.

PBBS 601A Pharmacology I 4 q.h.

HPAS 528 Research & Statistics 3 q.h.

HNAS 712 Clinical Correlations II 1 q.h.

**12 q.h.**

##### Term 4 Winter

HNAS 703 Principles of Anesthesia III 4 q.h.

PBBS 601B Pharmacology II 5 q.h.

HNAS 720 Anesthesia Pharmacology 3 q.h.

HNAS 713 Clinical Correlations III 1 q.h.

**12 q.h.**

**Term 5 Spring**

HNAS 706 Regional Anesthesia & Advanced Airway Management	3 q.h.
HNAS 810 Clinical Practicum I	10 q.h.
HNAS 714 Clinical Seminar I	1 q.h.
<b>14 q.h.</b>	

**Term 6 Summer**

HNAS 820 Clinical Practicum II	12 q.h.
HNAS 715 Clinical Seminar II	1 q.h.
<b>13 q.h.</b>	

**Term 7 Autumn**

HNAS 830 Clinical Practicum III	12 q.h.
HNAS 716 Clinical Seminar III	1 q.h.
<b>13 q.h.</b>	

**Term 8 Winter**

HNAS 840 Clinical Practicum IV	12 q.h.
HNAS 717 Clinical Seminar IV	1 q.h.
<b>13 q.h.</b>	

**Term 9 Spring**

HNAS 850 Clinical Practicum V	12 q.h.
HNAS 718 Clinical Seminar V	1 q.h.
HNAS 806 Master's Project	4 q.h.
<b>17 q.h.</b>	

**COURSE DESCRIPTIONS****CONTENT AREA: PHYSIOLOGY, PATHOPHYSIOLOGY  
16 Q.H.****HPAS 500 Gross Anatomy 10 q.h.**

This course utilizes formal lecture and cadaver dissection to perform an in-depth study of the structure of the entire human body. This format is supplemented with several lectures specifically designed to correlate the anatomical findings with clinical applications for the medical practitioner.

**HNAS 750 Physiology & Pathophysiology 6 q.h.**

In this course, physiology and pathophysiology for nurse anesthetists is presented through a Web-

supported platform that includes weekly quizzes and case discussions. Following an overview of cellular and neuronal physiology, the following body systems are emphasized: muscular-skeletal, cardiovascular, respiratory, renal, and endocrine.

**Prerequisite:** Admission to the Nurse Anesthesia program or admission to the University as a Special Student.

**CONTENT AREA: RESEARCH 7 Q.H.****HPAS 528 Research & Statistics 3 q.h.**

The purpose of this course is to introduce students to the utilization of research and statistics in health care. Topics include principles of research, ethics, information retrieval, the literature review and critical examination of articles. Students begin their work on group research projects and research competencies. In the statistics portion of the course, descriptive and inferential statistics are taught with relevance to health care research. Use of computer applications for statistical analysis is included.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

**HNAS 806 Master's Project 4 q.h.**

This is a major project including development of a problem statement, objectives for the experience and literature review. A significant outcome document, such as a research paper, course materials, or textbook chapter, is produced. Students will identify the topic of their master's project at the completion of HPAS 528 and have quarterly meetings with their advisors thereafter to discuss progress on the project. A public presentation about the project is made during term 9, the final quarter of study.

**Prerequisite:** Satisfactory completion of HPAS 528 and all other previous courses in the Nurse Anesthesia program or faculty approval.

**CONTENT AREA: PROFESSIONAL ASPECTS OF PRACTICE 5 Q.H.**

**HNAS 700 Professional Issues and Ethics 2 q.h.**

This course is designed to familiarize the student with the history and traditions of the nurse anesthesia profession. Students will learn about nurse anesthesia practice in various healthcare settings. This content will be complemented by a focused review of current philosophies, policies, and ethical issues in contemporary health care, emphasizing the perioperative setting. A hybrid approach of Web-supported didactics augmented with biweekly live review and case discussion sessions will be utilized.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

**CONTENT AREA: PHARMACOLOGY OF ANESTHETIC AGENTS & ADJUVANT DRUGS 12 Q.H.**

**PBBS601 A and B Pharmacology 9 q.h.**

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 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.

**HNAS 720 Advanced Nurse Anesthesia Pharmacology 3 q.h.**

This course covers the pharmacokinetic and pharmacodynamic principles of specific anesthetic and adjunct drugs in anesthesia practice. Information related to the selection, administration, dosage and side effects of these drugs is emphasized. Drug categories that will be covered include: intravenous induction agents/hypnotics; benzodiazepines; inhalation anesthetics; opioids; and muscle relaxants. A hybrid approach of Web-supported didactics

augmented with biweekly live review and case discussion sessions will be utilized.

**Prerequisite:** HPAS 531 and satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

**CONTENT: ANESTHESIA PRACTICE – PHYSICS, EQUIPMENT, PRINCIPLES AND PAIN MANAGEMENT 17 Q.H.**

**HNAS 710 Chemistry and Physics of Anesthesia 3 q.h.**

This course provides basic science foundational to anesthesia practice, including: gas laws; the basics of chemistry; biological macromolecules; physics related to anesthesia and monitoring equipment; medical mathematics, and a review of pharmacokinetics and pharmacodynamic are all presented. A hybrid approach of Web-supported didactics augmented with biweekly live review and case discussion sessions will be utilized.

**Prerequisite:** Admission to the Nurse Anesthesia program.

**HNAS 701 Principles of Anesthesia I 4 q.h.**

Basic principles of nurse anesthesia will be discussed, including: preoperative assessment; the anesthesia machine and breathing circuits; airway management; legal and historical aspects of nurse anesthesia practice. An overview of basic anesthesia pharmacology will be presented. A hybrid approach of Web-supported didactics augmented with biweekly live review and case discussion sessions will be utilized.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

**HNAS 702 Principles of Anesthesia II 3 q.h.**

Building on content presented in HNAS 701, this course will provide an overview of advanced principles of anesthesia care. Anesthetic considerations for specialty surgical areas such as peripheral vascular, cardiovascular, neurological,

thoracic, orthopedic, trauma and burns will be reviewed. A hybrid approach of Web-supported didactics augmented with biweekly live review and case discussion sessions will be utilized.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 703 Principles of Anesthesia III 4 q.h.**

In this course, anesthetic considerations for obstetric and pediatric patients will be discussed. Unique anatomic, physiologic and pathophysiologic considerations related to these patient populations will be reviewed. A hybrid approach of Web-supported didactics augmented with biweekly live review and case discussion sessions will be utilized.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 706 Regional Anesthesia & Advanced Airway Management 3 q.h.**

This course covers the anatomy and physiology of the peripheral nerves, spinal cord, upper and lower airways. The pharmacology of local anesthetics and administration and management of regional anesthesia (peripheral, neuraxial, inhaled, topical, local infiltration) is emphasized. Acute and chronic pain management will be discussed. This course will meet in the Anesthesia Department at Hines VA Hospital and on campus in the anatomy lab.

Prosections of the head and neck will be used to teach airway anatomy, physiology, pathophysiology and regional anesthesia anatomy for the airway

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **CONTENT: CLINICAL CORRELATION EXPERIENCES 8 Q.H.**

##### **HNAS 711 Clinical Correlations I 1 q.h.**

This course provides initial clinical correlation with didactic content through use of the human patient

simulator. Students will review the steps in preoperative assessment, anesthesia care planning, implementation and evaluation. Checkout and troubleshooting of the anesthesia machine will also be reviewed.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

##### **HNAS 712 Clinical Correlations II 1 q.h.**

During this experience, students will rotate to clinical sites for preoperative clinic experiences in patient assessment and anesthesia care planning, one morning per week.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

##### **HNAS 713 Clinical Correlations III 1 q.h.**

This will be the introduction to the operating room and clinical anesthesia. Students will be assigned to observe anesthesia across the perioperative continuum one morning per week.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

##### **HNAS 714 Clinical Correlations IV 1 q.h.**

This is the initial clinical correlation conference (case studies, key words presentations) during Term 5. Clinical commitments will not exceed four weekdays or 32 hours per week to accommodate scheduling of HNAS 706, Regional Anesthesia & Advanced Airway Management. HNAS 714 and HNAS 706 will meet on alternate Fridays during Term 5.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

##### **HNAS 715 Clinical Seminar I 1 q.h.**

During the clinical practicum, students will return to campus one day per month for key word presentations, case discussions, and board review

activities. Students will critique assigned articles and learn how to develop presentations.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 716 Clinical Seminar II 1 q.h.**

During the clinical practicum, students will return to campus one day per month for key word presentations, case discussions, and board review activities. Students will critique assigned articles and learn how to develop presentations.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 717 Clinical Seminar III 1 q.h.**

During the clinical practicum, students will return to campus one day per month for key word presentations, case discussions, and board review activities. Students will critique assigned articles and learn how to develop presentations.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 718 Clinical Seminar IV 1 q.h.**

During the clinical practicum, students will return to campus one day per month for key word presentations, case discussions, and board review activities. Students will critique assigned articles and learn how to develop presentations.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **CONTENT: CLINICAL EXPERIENCE 58 q.h.**

#### **HNAS 810 Clinical Practicum I 10 q.h.**

This is the first clinical practicum that will occur during Term 5. To allow for the transition to a full-time clinical practicum and accommodate HNAS 706 during this term, students will be in the clinical area four days per week or not greater than 32 hours per

week. Students will be supervised by CRNAs and anesthesiologists at a variety of clinical sites at the three VA 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 once-monthly clinical correlation conference (HNAS 714) to review clinical experiences, present key words, and conduct case discussions.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 820 Clinical Practicum II 12 q.h.**

During this quarter, students will continue rotations at VA clinical sites and begin rotations to non-VA and other sites contingent on documented progress in daily clinical evaluations. Students will be in the clinical area five days per week, or for approximately 40 hours, as negotiated with the clinical coordinators. Students will be 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 715) to review clinical experiences, critique journal articles, present key words, conduct case discussions, and review progress on master's projects.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 830 Clinical Practicum III 12 q.h.**

Students will continue rotations at VA and other clinical sites contingent on documented progress in daily clinical evaluations. Students will be in the clinical area five days per week, or for approximately

40 hours, as negotiated with the clinical coordinators. Students will be 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 716) to review clinical experiences, critique journal articles, present key words, conduct case discussions, and review progress on master's projects.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 840 Clinical Practicum IV 12 q.h.**

Students will continue rotations at VA and other clinical sites contingent on documented progress in daily clinical evaluations. Students will be in the clinical area five days per week, or for approximately 40 hours, as negotiated with the clinical coordinators. Students will be 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 717) to review clinical experiences, critique journal articles, present key words, conduct case discussions, and review progress on master's projects.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **HNAS 850 Clinical Practicum V 12 q.h.**

Students will continue rotations at VA and other clinical sites contingent on documented progress in daily clinical evaluations. Students will be in the

clinical area five days per week, or for approximately 40 hours, as negotiated with the clinical coordinators. Students will be 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, critique journal articles, present key words, conduct case discussions, and review progress on master's projects. The final two weeks of this quarter will be reserved for presentation of master's projects, board review activities, and graduation-related processes.

**Prerequisite:** Satisfactory completion of all previous courses in the Nurse Anesthesia program or faculty approval.

#### **OTHER REQUIRED COURSES 1 Q.H.**

##### **HMTD 500 Interprofessional Healthcare Teams 1 q.h.**

This is an experiential learning opportunity for all students at RFUMS to learn about the collaborative care model. Students will interact in health care teams focused on patient-centered care, emphasizing evidence-based practice, quality improvement strategies and informatics.

#### **PART-TIME CURRICULUM**

In the part-time program of study, the didactic curriculum extends over nine rather than five quarters. Credits per quarter in the part-time program range from five to 10 credits. In quarters 7 through 9, there will be one day per week of observation and clinical practicum in the OR. This will enable students to correlate didactic content with clinical practice and become familiar with the clinical area prior to beginning the full-time practicum. Time demands for students will increase in quarters 7-9. The clinical practicum would still be full-time.

The choice of full- or part-time track will be left up to the individual student, who will declare their intent at the time enrollment is offered.

#### **Term 1 – Spring**

HNAS 750 Physiology & Pathophysiology 6 q.h.  
**6 q.h.**

#### **Term 2 – Summer**

HPAS 500 Gross Anatomy 10 q.h.  
**10 q.h.**

#### **Term 3 – Autumn**

HPAS 530 Pharmacology I 4 q.h.  
HPAS 528 Research & Statistics 3 q.h.  
**7 q.h.**

#### **Term 4 – Winter**

HPAS 531 Pharmacology II 4 q.h.  
**4 q.h.**

#### **Term 5 – Spring**

HNAS 710 Chemistry & Physics in Anesthesia 3 q.h.  
HNAS 701 Principles of Anesthesia I 3 q.h.  
HNAS 711 Clinical Correlations I 1 q.h.  
**7 q.h.**

#### **Term 6 – Summer**

HNAS 700 Professional Issues & Ethics 2 q.h.  
**2 q.h.**

#### **Term 7 – Autumn**

HMTD 500 Interprofessional Healthcare Teams 1 q.h.  
HNAS 702 Principles of Anesthesia II 3 q.h.  
HNAS 712 Clinical Correlations II 1 q.h.  
**2 q.h.**

#### **Term 8 – Winter**

HNAS Principles of Anesthesia III 4 q.h.  
HNAS 720 Anesthesia Pharmacology 3 q.h.  
HNAS 713 Clinical Correlations III 1 q.h.  
**8 q.h.**

#### **Term 9 – Spring**

HNAS 706 Regional Anesthesia & Advanced Airway Management 3 q.h.  
HNAS 810 Clinical Practicum I 10 q.h.  
HNAS 714 Clinical Seminar I 1 q.h.  
**14 q.h.**

#### **Term 10 – Summer**

HNAS 811 Clinical Practicum II 12 q.h.  
HNAS 715 Clinical Seminar II 1 q.h.  
**13 q.h.**

#### **Term 11 – Autumn**

HNAS 812 Clinical Practicum III 12 q.h.  
HNAS 716 Clinical Seminar III 1 q.h.  
**13 q.h.**

#### **Term 12 – Winter**

HNAS 813 Clinical Practicum IV 12 q.h.  
HNAS 717 Clinical Seminar IV 1 q.h.  
**13 q.h.**

#### **Term 13 – Spring**

HNAS 814 Clinical Practicum V 12 q.h.  
HNAS 718 Clinical Seminar V 1 q.h.  
HNAS 806 Master's Project 4 q.h.  
**17 q.h.**

#### **Faculty**

Lenore M. Litwin, CRNA, MSN Program Director & Acting Chair

Susan McMullan, CRNA, MSN Assistant Program Director & Assistant Chair

Jennifer Greenwood, CRNA, MS, Student Clinical Coordinator & Clinical Site Development Coordinator

Ali Tabatabai, CRNA, MSN

Jay Tumulak, CRNA, MS

Peter Kallio, CRNA, MSN, APNP

Peter Strube, CRNA, MSN, APNP

## DEPARTMENT OF NUTRITION

### Department Description

The Master of Science in Nutrition program at Rosalind Franklin University of Medicine and Science is designed to improve the skills of the nutrition professional. The distance learning graduate program in the Department of Nutrition focuses on the development of competency in five areas: application of nutrition knowledge, teaching nutrition information, demonstration of the processes of critical inquiry and research, application of technology to professional activities, and demonstration of effective professional communication. Courses in the use of computer software and information literacy round out the curricula for two program tracks that provide our students with a competitive edge for positions in administration, clinical dietetics, nutrition education, health professional training programs, the food industry, and research. Students can follow a program track in Clinical Nutrition or Nutrition Education. Thesis and non-thesis options are available for both program tracks.

The MS Program in Nutrition is taught online and is designed for students who are employed full-time, have other personal or professional commitments, are self-motivated and goal-oriented, have the ability to work independently, and cannot or do not wish to relocate to participate in a traditional campus-based program. Students enroll in one or two courses per quarter. All coursework, projects, and exams are completed online. No on-campus attendance is required. Students are required to have access to a computer and acquire direct Internet access. Contact between faculty and students is conducted through the Internet, e-mail, telephone, postal mail, and fax. Although our program is more convenient, it is not an easy route for earning a graduate degree. Our academic standards are high and the curriculum is challenging.

To apply for admission, students must follow the standard procedures used at Rosalind Franklin University of Medicine and Science. Once accepted, students have up to five (5) years to complete the Master of Science in Nutrition degree.

### Admission Procedures and Requirements

- Bachelor's degree in nutrition, dietetics, or a related health or science field from an accredited institution. (A strong science background is needed. Required science courses include biology, chemistry with lab, organic chemistry with lab, physiology and biochemistry.) If you are considering a career change or are not a registered dietitian and/or do not possess a degree in nutrition, please contact the Department for individual advising. For those with a degree in the sciences but without a degree in nutrition, the Department does offer a series of three transition courses covering basic human nutrition, nutrition through the lifecycle, and clinical nutrition, designed to provide you with the background knowledge to participate in our program.
- Cumulative minimum grade point average of 2.75 on 4.0 scale during the last two years of college.
- Work experience in nutrition and/or dietetics or a related health or science field (highly recommended).
- Submission of a completed application packet (applications can be downloaded from our Web site at [www.rosalindfranklin.edu](http://www.rosalindfranklin.edu)), nonrefundable application fee and two letters of recommendation from persons involved in previous or current educational and/or work experience, whichever is more extensive and recent.
- Official transcripts submitted from every college and university previously attended.

- Proficiency in written and verbal English. Official results of the Test of English as a Foreign Language (TOEFL), if the Bachelor's Degree is from a foreign university where English is not the native language.
- The Department of Nutrition follows a rolling admissions policy, which means that applications are reviewed by the Department Admissions Committee once the applicant's file has been completed, with notification of the Committee's decision sent shortly thereafter. All successful candidates are accepted for Fall, Winter or Spring Quarter, with Fall Quarter preferred.

## REQUIREMENTS FOR THE MS DEGREE

### DEGREE TRACKS:

#### CLINICAL NUTRITION PROGRAM TRACK (NON-THESIS)

- A minimum of 42 quarter hours (q.h.) of graduate credit is required for the degree
- 17 q.h. Nutrition Core
- 7 q.h. Research Core
- 3 q.h. Computer Technology Core
- 6 q.h. Education Core
- 6 q.h. Electives
- 3 q.h. MS Portfolio Evaluation
- Cumulative grade point average of 3.0 (B) or better
- Successful completion of the Final Portfolio Evaluation
- Demonstration of computer proficiency
- Completion of all program requirements within five (5) years from the time of acceptance into the program

### CURRICULUM

#### Research Core:

HPTH 501 Practical Statistics  
HNUT 580 Evaluating Research

#### Educational Core:

HNUT 505 Communicating as a Nutrition Professional  
HNUT 532 Instructional Design

#### Nutrition Core:

HNUT 550 Carbohydrate and Lipid Metabolism  
HNUT 551 Protein and Energy Metabolism  
HNUT 552 Vitamins and Minerals  
HNUT 554 Nutrition in Critical Care  
HNUT 556 Critical Analysis of Nutrition  
Recommendations

#### Computer Technology Core:

HNUT 504 Information Literacy for Health Professionals

#### Final Portfolio Evaluation

HNUT 596 Portfolio Evaluation  
Completion of 6 quarter hours of elective coursework\*

#### CLINICAL NUTRITION PROGRAM TRACK (THESIS)

- A minimum of 52 quarter hours (q.h.) of graduate credit is required for the degree
- 17 q.h. Nutrition Core
- 9 q.h. Research Core
- 3 q.h. Computer Technology Core
- 6 q.h. Education Core
- 3 q.h. Electives
- 14 q.h. Thesis Core
- Cumulative grade point average of 3.0 (B) or better
- Completion and submission of an acceptable written thesis
- Successful thesis defense
- Demonstration of computer proficiency
- Completion of all program requirements within five (5) years from the time of acceptance into the program

## CURRICULUM

### Research Core:

HPTH 501 Practical Statistics  
 HNUT 580 Evaluating Research  
 HNUT 590 Thesis Topic Development

### Education Core:

HNUT 505 Communicating as a Nutrition  
 Professional  
 HPTH 532 Instructional Design

### Nutrition Core:

HNUT 550 Carbohydrate and Lipid Metabolism  
 HNUT 551 Protein and Energy Metabolism  
 HNUT 552 Vitamins and Minerals  
 HNUT 554 Nutrition in Critical Care  
 HNUT 556 Critical Analysis of Nutrition  
 Recommendations

### Computer Technology Core:

HNUT 504 Information Literacy for Health  
 Professionals

Completion of online training modules in the use of  
 required software (optional).

### Thesis Core:

HNUT 592 Proposal Development  
 HNUT 593 Thesis Research  
 HNUT 594 Data Analysis Lab

## NUTRITION EDUCATION PROGRAM TRACK (NON- THESIS)

- A minimum of 42 quarter hours (q.h.) of graduate credit is required for the degree
- 11 q.h. Nutrition Core
- 7 q.h. Research Core
- 7 q.h. Research Core
- 12 q.h. Education Core
- 6 q.h. Electives
- 3 q.h. MS Final Portfolio Evaluation
- Cumulative grade point average of 3.0 (B) or

better

- Successful completion of the Final Portfolio Evaluation
- Demonstration of computer proficiency
- Completion of all program requirements within five (5) years from the time of acceptance into the program.

## CURRICULUM

### Research Core:

HPTH 501 Practical Statistics  
 HNUT 580 Evaluating Research

### Education Core:

HNUT 505 Communicating as a Nutrition  
 Professional  
 HNUT 525 Evaluation  
 HNUT 532 Instructional Design  
 HNUT 533 Online Instruction

### Nutrition Core:

HNUT 550 Carbohydrate and Lipid Metabolism  
 HNUT 551 Protein and Energy Metabolism  
 HNUT 552 Vitamins and Minerals

### Computer Technology Core:

HNUT 504 Information Literacy for Health  
 Professionals

Completion of online training modules in the use of  
 required software (optional).

### Final Portfolio Evaluation

HNUT 596 Portfolio Evaluation

### Electives

Completion of 6 quarter hours (q.h.) of elective  
 coursework.\*

### **NUTRITION EDUCATION PROGRAM TRACK (THESIS)**

- A minimum of 52 quarter hours (q.h.) of graduate credit is required for the degree
- 11 q.h. Nutrition Core
- 9 q.h. Research Core
- 14 q.h. Thesis Core
- 3 q.h. Computer Technology Core
- 12 q.h. Education Core
- 3 q.h. Electives
- Cumulative grade point average of 3.0 (B) or better
- Completion and submission of an acceptable written thesis
- Successful thesis defense
- Demonstration of computer proficiency
- Completion of all program requirements within five (5) years from the time of acceptance into the program.

### **Curriculum**

#### **Research Core:**

HPTH 501 Practical Statistics  
 HNUT 580 Evaluating Research  
 HNUT 590 Thesis Topic Development

#### **Education Core:**

HNUT 505 Communicating as a Nutrition Professional  
 HNUT 525 Evaluation  
 HNUT 532 Instructional Design  
 HNUT 533 Online Instruction

#### **Nutrition Core:**

HNUT 550 Carbohydrate and Lipid Metabolism  
 HNUT 551 Protein and Energy Metabolism  
 HNUT 552 Vitamins and Minerals

#### **Computer Technology Core:**

HNUT 504 Information Literacy for Health Professionals  
 Completion of online training modules in the use of required software (optional).

#### **Thesis Core:**

HNUT 592 Proposal Development  
 HNUT 593 Thesis Research  
 HNUT 594 Data Analysis Lab

#### **\*Electives FOR CLINICAL NUTRITION PROGRAM TRACK AND NUTRITION EDUCATION PROGRAM TRACK**

HHCM 517 Management Ethics  
 HHCM 519 Practice Management  
 HHCM 520 Cultural Diversity and the Management of Healthcare Services  
 HHCM 522 Healthcare Delivery Systems  
 HHCM 525 Strategic Planning and Leadership in Healthcare  
 HNUT 533 Online Instruction<sup>+</sup>  
 HNUT 541 Promoting Healthy Lifestyles  
 HNUT 542 Herbs, Dietary and Sports Supplements  
 HNUT 554 Nutrition in Critical Care<sup>++</sup>  
 HNUT 571 Sports Nutrition  
 HNUT 525 Evaluation<sup>+</sup>  
 HNUT 556 Critical Analysis of Nutrition Recommendations<sup>++</sup>  
<sup>+</sup> Elective for Clinical Nutrition track only.  
<sup>++</sup> Elective for Nutrition Education track only.

### **COURSE SCHEDULE**

#### **Fall Quarter**

HNUT 504 Information Literacy for Health Professionals  
 HHCM 519 Practice Management  
 HNUT 532 Instructional Design  
 HNUT 571 Sports Nutrition  
 HNUT 580 Evaluating Research  
 HHCM 525 Strategic Planning and Leadership in Healthcare  
 HNUT 596 Portfolio Evaluation

#### **Winter Quarter**

HPTH 501 Practical Statistics  
 HNUT 505 Communicating as a Nutrition Professional

HHCM 517 Management Ethics  
 HHCM 522 Healthcare Delivery Systems  
 HNUT 550 Carbohydrate and Lipid Metabolism  
 HNUT 556 Critical Analysis of Nutrition  
 Recommendations  
 HNUT 596 Portfolio Evaluation

### **Spring Quarter**

HHCM 520 Cultural Diversity and the Management of  
 Healthcare Services  
 HNUT 533 Online Instruction  
 HNUT 541 Promoting Healthy Lifestyles  
 HNUT 542 Herbs, Dietary and Sports Supplements  
 HNUT 551 Protein and Energy Metabolism  
 HNUT 554 Nutrition in Critical Care  
 HNUT 596 Portfolio Evaluation

### **Summer Quarter**

HNUT 525 Evaluation  
 HNUT 552 Vitamins and Minerals  
 HNUT 596 Portfolio Evaluation

## **COURSES OFFERED**

### **HPTH 501 Practical Statistics 3 q.h.**

An introductory graduate course covering basic principles of biometry and applied statistical methods utilizing current computer software.

### **HNUT 504 Information Literacy for Health Professionals 3 q.h.**

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.

### **HNUT 505 Communicating as a Nutrition Professional 3 q.h.**

This course targets skills and techniques to enhance the effectiveness of professional and consumer-oriented communications. Translation of evidence-based science into layman's terms will be emphasized. Development of skills needed to create educational materials for various literacy levels and cultures will be stressed.

### **HHCM 517 Management Ethics 3 q.h.**

The curriculum 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 519 Practice Management 3 q.h.**

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 Services 3 q.h.**

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 healthcare can use to diminish the conflict that patients may experience between their traditions related to cultural heritage and the American healthcare system.

### **HHCM 522 Healthcare Delivery Systems 3 q.h.**

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 discussed. The concepts of cost, access and quality will be threaded throughout the course.

### **HNUT 525 Evaluation 3 q.h.**

This course is designed to give you skills and tools used in the evaluation of educational materials, teaching methods and learning outcomes. Designed to enable you to effectively develop and implement the appropriate skills and tools to evaluate the performance of either a nutrition student or employee in both a nutrition education and clinical nutrition setting

**Prerequisite:** HNUT 532 Instructional Design or permission of Instructor.

### **HHCM 525 Strategic Planning and Leadership in Healthcare 3 q.h.**

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.

### **HNUT 532 Instructional Design 3 q.h.**

Designed to provide the healthcare professional with educational skills and techniques for the classroom, the individual patient and for continuing education programs. The skills and techniques addressed are: developing teaching outlines to include behavioral objectives and interactive teaching, needs assessment, and educational outcomes, communication and motivational techniques and theories for teaching the adult learner.

### **HNUT 533 Online Instruction 3 q.h.**

Focuses on the practical considerations of planning and developing courses for successful online learning. Topics covered include: Characteristics of distance learners and instructors; course design and development; teaching and tutoring; needs assessment and evaluation strategies; using the World Wide Web in education; and online learning technologies. Students apply what they have learned

in development of their own online course blueprint.  
**Prerequisite:** HNUT 532 Instructional Design or permission of Instructor.

#### **HNUT 541 Promoting Healthy Lifestyles 3 q.h.**

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 2010*, students will develop health promotion activities for community health problems of their choice based on an assessment of need. Students will develop and track an individual health promotion plan for themselves.

#### **HNUT 542 Herbs, Dietary and Sports Supplements 3 q.h.**

Covers the use of herbs, botanicals, vitamins, minerals, and other substances such as caffeine as dietary supplements. Topics include the functions (where known) of the active principle ingredient of the supplement as well as the potential benefits, concerns, and regulatory issues surrounding the use of dietary supplements.

#### **HNUT 550 Carbohydrate and Lipid Metabolism 4 q.h.**

An in-depth study of the integration of carbohydrate and lipid metabolism as they relate to the fed, fasted, and re-fed states and to major disease processes. HHCM 550 Strategic Planning in Healthcare 3 q.h. This course is intended to introduce the student to strategic planning in healthcare organizations. The course content provides an overview of the strategic planning process including the elements required to successfully develop and implement short-term and long-term plans. In addition to application of the elements to a variety of healthcare situations, students will have the opportunity to apply this

process to their own educational plan for personal academic success.

#### **HNUT 551 Protein and Energy Metabolism 4 q.h.**

A continuation of the topics presented in HNUT 550 Carbohydrate and Lipid Metabolism, starting with protein metabolism and ending with an overview of energy metabolism. Topics to be addressed include protein structure, function, and quality; general properties, kinetics, and mechanisms of action of enzymes; integration of metabolism and the provision of tissue fuels during the fed, fasted, starved, and hypermetabolic states; and the regulation of food intake, body weight/composition and energy metabolism. The latter covers the key components of energy expenditure and methods of measurements.

#### **HNUT 552 Vitamins and Minerals 3 q.h.**

Covers the structure, function, metabolism, requirements, deficiencies, and toxicities of the different vitamins, minerals, trace minerals, and ultra-trace minerals, and fluid and electrolyte balance.

#### **HNUT 554 Nutrition in Critical Care 3 q.h.**

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.

**Prerequisites:** HNUT 580 Evaluating Research, HPTH 101 Practical Statistics and R.D. Credential or permission of instructor.

#### **HNUT 556 Critical Analysis of Nutrition Recommendations 3 q.h.**

A clinical analysis of the pathophysiological and metabolic basis for nutritional management in the prevention and treatment of disease. Critical review and analysis of current recommendations for management, treatment, and prevention of disease will be a primary focus of the course.

**Prerequisites:** HNUT 550 Carbohydrate and Lipid Metabolism, HNUT 551 Protein and Energy Metabolism and HNUT 580 Evaluating Research or

permission of instructor.

### **HNUT 571 Sports Nutrition 3 q.h.**

Sports Nutrition focuses on the physiological & metabolic responses of the body to exercise and the role of nutrition in these processes. Macronutrient and micronutrient needs of the athlete and the nutritional needs of special athletic populations will be addressed.

### **HNUT 580 Evaluating Research 4 q.h.**

An introductory graduate course covering fundamentals of the research process with the desired end result being the ability to critically analyze and interpret published research.

### **HNUT 596 Portfolio Evaluation 3 q.h.**

The Master of Science in Nutrition degree focuses on five competency areas: application of nutrition knowledge, teaching nutrition information, demonstration of the processes of critical inquiry and research, application of technology to professional activities, and demonstration of effective professional communication. Achievement of specific learning objectives in these areas of competency will be demonstrated by the student through development of projects during the course of his/her degree program. These projects 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 projects with analysis and reflections for each. Portfolio Evaluation is the final degree requirement and capstone experience for all students in the Master of Science in Nutrition program.

### **HNUT 590 Thesis Topic Development 2 q.h.**

The process of analysis and critique of the literature continues as students integrate the research process into professional practice. Students in the thesis option develop an initial research question and write a brief review of the relevant literature. This document will be expanded and refined in Proposal Development.

### **HNUT 592 Proposal Development 3 q.h.**

Students are guided through the steps necessary for the development of their thesis proposals. Students identify a research problem, develop an appropriate project design, and identify the appropriate methodology for data collection and analysis. This course lays the groundwork for completion of research work and thesis.

### **HNUT 593 Thesis Research 9 q.h.**

Students implement their research proposal through collection, statistical analysis, and evaluation of data. Submission of an acceptable thesis and successful oral defense of research findings by students are the culminating events for both this course and the graduate degree program.

### **HNUT 594 Data Analysis Laboratory 2 q.h.**

Focuses on the use of a computer-based professional statistics software package in applying the concepts learned in HPTH 501. Using this software, students will learn to run a variety of parametric and non-parametric, descriptive and inferential statistical tests such as frequency distributions, measures of central tendency, t-Tests, ANOVA, Mann-Whitney U, Kruskal-Wallis H, repeated measures, and curvilinear correlation statistics for trend analysis. Output sheets of test results will then be evaluated and modified into pivot tables and charts for use in professional presentations. The use and incorporation of data spreadsheets into the statistics program format will also be addressed.

### **HNUT 502 Fundamentals of Human Nutrition 0 q.h.**

This self-directed 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. This course is the first in the series of three nutrition transition courses.

### **HNUT 555 Nutrition Through the Life Cycle**

**0 q.h.**

An in-depth review of the theory and application of the nutritional requirements and concerns of people during the different states of the life cycle. This is the second in the series of three nutrition transition courses.

### **HNUT 503 Fundamentals of Clinical Nutrition**

**0 q.h.**

This self-directed course provides an in-depth overview of human clinical nutrition including the components and measurement techniques of a nutritional assessment as well as the etiology and medical nutrition therapy of various disease conditions such as obesity; cardiovascular disease; hypertension, osteoporosis; diabetes mellitus (type 1 and type 2); gastrointestinal, renal, neurological, and pulmonary diseases; anemia, sepsis; trauma; cancer; and other metabolic diseases. This course is the third in the series of three nutrition transition courses.

### **Faculty**

Melissa Bernstein, PhD, RD, LD, Assistant Professor

Hope Bilyk, MS, RD, Assistant Professor

Lynn Janas, PhD, Assistant Professor and Chair

Sandra Salloway, ND, RN, Professor

Melanie Shuran, PhD, RD, LDN, Professor

## DEPARTMENT OF PATHOLOGISTS' ASSISTANT

### **Professional Definition:**

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.

### **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 health care 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 assures 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 health care 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 health care 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.

### **Programmatic Accreditation**

**Pathologists' Assistant Program Accreditation:** National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) 5600 N. River Road, Suite 720, Rosemont, IL 60018-5119; 773-714-8880.

### **Degree Granted**

Master of Science in Pathologists' Assistant Studies

### **Admission Requirements**

Admission to the program is competitive. Class members are selected on the basis of academic record, letters of recommendation, an admission essay, evidence of exposure to anatomic pathology and an interview.

Successful applicants will have graduated with a Bachelor's degree from an accredited college or university and usually have a cumulative GPA of at least 3.0 (on a 4.0 scale). 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.

### **Prerequisites**

A minimum of one course in each of the following subjects:

- Biological Science (Human Anatomy and Physiology recommended)
- Microbiology
- General Chemistry
- Organic and/or Biochemistry
- College-level Mathematics (Statistics recommended)
- English Composition

### **Application Deadline**

Applications are reviewed as they are received. Applicants are strongly encouraged to submit their completed application in the Summer/Fall of the year preceding their anticipated start of the program. Applications must be received by March 31st of the year for which you are applying.

### **Program Learning Objectives**

Upon completion of the 22-month master's degree program, students should be able to conduct the practice of a Pathologists' Assistant in a professional manner by:

- Engaging in an evidence-based medicine practice within the anatomic pathology laboratory.
- Synthesizing clinical information from various sources to present comprehensive clinical pathologic correlations.
- Effectively communicating complex anatomic pathology information in written, verbal and photographic forms.
- Discerning 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.
- Recognizing the dignity of their patients and their responsibilities to the family and community at large.
- Providing 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.
- Acting as stewards of the profession for students, colleagues and the public through education and research into the art and science of the practice of anatomic pathology.

### **Graduation Requirements**

Successful completion of the didactic and clinical curriculum.

### **Curriculum**

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 and internationally known clinical affiliates.

**PATHOLOGISTS' ASSISTANT DEPARTMENT****Program of Study****Year 1****Summer Quarter**

MCBA 501 Clinical Anatomy	10 q.h.
HAPA 560 Clinical Correlations I / Human Embryology	4 q.h.
HAPA 560a Clinical Correlations I Lab	1 q.h.
HAPA 550 Seminar I – Professional Issues & Ethics	1 q.h.
HAPA 535 Medical Terminology	1 q.h.

**Fall Quarter**

MPAT 600A General Pathology	6 q.h.
PBBS 503A Structure & Function	7 q.h.
HAPA 561 Clinical Correlations II	4 q.h.
HAPA 561a Clinical Correlations II Lab	1 q.h.
HAPA 551 Seminar II-Research Design & Methodology	1 q.h.
HMTD 500 Interprofessional Healthcare Teams	1 q.h.

**Winter Quarter**

MPAT 600B Systemic Pathology	6 q.h.
PBBS 503B Structure & Function	4 q.h.
HAPA 562 Clinical Correlations III	5 q.h.
HAPA 562a Clinical Correlations III Lab	2 q.h.
HAPA 552 Seminar III-Research Design & Methodology II	1 q.h.
HMTD 501 Culture in Healthcare	1 q.h.

**Spring Quarter**

MPAT 600C Systemic Pathology	7 q.h.
HAPA 563 Clinical Correlations IV	5 q.h.
HAPA 563a Clinical Correlations IV Lab	2 q.h.
HAPA 553 Seminar IV - Medicine & the Humanities	1 q.h.
HAPA 540 Autopsy Pathology	4 q.h.
PBBS 504b Neuroscience	4 q.h.
HMTD 551 Leadership in the Healthcare Environment	3 q.h.

**Year 2****Summer Quarter**

HAPA 630 Anatomic Pathology Clerkship I	12 q.h.
---	---------

**Fall Quarter**

HAPA 631 Anatomic Pathology Clerkship II	12 q.h.
--	---------

**Winter Quarter**

HAPA 632 Anatomic Pathology Clerkship III	12 q.h.
---	---------

**Spring Quarter**

HAPA 633 Anatomic Pathology Clerkship IV	12 q.h.
--	---------

**Course Descriptions****First year - Summer Quarter****MCBA 501 Clinical Anatomy (Lecture/Laboratory) 10 q.h.**

Structure of the entire human body is studied through formal lectures and cadaver-based laboratories. Emphasis is placed on the clinical applications of anatomy.

**HAPA 560 Clinical Correlations I / Human Embryology (Lecture) 4 q.h.**

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 segment provides an introduction to the basic principles of human development and biomedical imaging. The human development portion starts from embryo to fetus to post-uterine life with course work structured to synchronize with gross anatomy. Lectures will present normal development with an emphasis placed on clinical scenarios commonly encountered in an anatomical laboratory setting. The biomedical imaging portion is designed to introduce students to both radiology and gross photography.

### **HAPA 560a Clinical Correlations I (Laboratory)**

**1 q.h.**

This is the first part of a full-year laboratory sequence designed to provide a practical, hands-on experience to the didactic portion of the corresponding Clinical Correlations lecture sequence. This segment provides an introduction to the basic principles of human development and biomedical imaging. The human development portion will utilize fetal specimens for demonstration and practice of techniques used by a Pathologists' Assistant. The biomedical imaging portion is designed to introduce students to the practice of gross photography in a variety of laboratory situations

### **HAPA 550 Seminar I-Professional Issues & Ethics (Lecture/ Independent Study) 1 q.h.**

This course is designed as an introduction to the profession. Students will become familiar with the history and traditions of the Pathologists' Assistant Profession, and will learn about the work of Pathologists' Assistants as they function in various health care settings. This is complemented by a focused review of contemporary medical ethics.

### **HAPA 535 Medical Terminology (Lecture/ Independent Study) 1 q.h.**

An advanced medical terminology course for graduate pathologists' assistant students.

### **First Year - Fall Quarter**

### **MPAT 600A General and Systemic Pathology (Lecture/Laboratory) 6 q.h.**

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. This is the medical school pathology course sequence and spans three quarters..

### **PBBA 503 A and B Structure and Function (Lecture/Laboratory) 11 q.h.**

This course presents the principles of medical histology and physiology. Normal organ system will be examined at the ultrastructural, microscopic, and whole-organ levels. The histology lab uses virtual microscopy in the University's computer labs. The course is an important prerequisite for Pathology, Pharmacology and Medicine.

### **HAPA 561 Clinical Correlations II (Lecture) 4 q.h.**

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 segment provides the student with an introduction to clinical practice in the anatomic pathology laboratory, emphasizing the applications of histology techniques and histochemistry, in addition to the basic principles of medical microbiology and laboratory safety.

### **HAPA 561A Clinical Correlations II (Laboratory) 1 q.h.**

This segment provides an introduction to the basic principles of histochemistry technique, microbiology and laboratory safety, complementing HAPA 561.

### **HAPA 551 Seminar II- Research Design & Methodology I (Lecture/Discussion) 1 q.h.**

This is the first quarter of a two-quarter seminar on research design and methodology. The seminar is designed to provide students with an opportunity to engage in an in-depth exploration of a topic of their group's choosing, related to either pathologists' assistant education and professionalization or pathologists' assistant clinical practice. The goal of the seminar is to survey and critique current literature related to the chosen topic then design and execute a study which will add to the current body of research about pathologists' assistants. The work will culminate

in the production of a poster to be shown next year at the All School Research Symposium in the Spring and at the AAPA annual meeting in the Fall.

**HMTD 500 Interprofessional Healthcare Teams (Lecture/Discussion) 1 q.h.**

This course is an experiential learning opportunity for all students at Rosalind Franklin University of Medicine and Science to learn about a collaborative model of care. The students will interact in healthcare teams focusing on patient-centered care emphasizing evidence-based practice, quality improvement strategies and informatics.

**First Year - Winter Quarter**

**MPAT 600B Systemic Pathology (Lecture/Laboratory) 5 q.h.**

Continuation of MPAT 600A.

**PBBS 503B Structure and Function (Lecture/Laboratory) 4 q.h.**

Continuation of PBBS 503A.

**HAPA 562 Clinical Correlations III (Lecture) 3 q.h.**

This is the third segment of the 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 segment emphasizes systemic surgical pathology running parallel to MPAT 600B.

**HAPA 561A Clinical Correlations III (Lab) 2 q.h.**

Laboratories are designed to promote critical thinking, utilizing specimens from the Pathologists' Assistant Department teaching collection, in addition to the prosection of animal and human tissue..

**HAPA 552 Seminar III- Research Design & Methodology II (Lecture/ Discussion) 1 q.h.**

Continuation of HAPA 551.

**First Year - Spring Quarter**

**MPAT 600C Systemic Pathology (Lecture/laboratory) 5 q.h.**

Continuation of MPAT 600B.

**HAPA 563 Clinical Correlations IV (Lecture) 5 q.h.**

Continuation of HAPA 562.

**HAPA 563a Clinical Correlations IV (Laboratory) 2 q.h.**

Continuation of HAPA 562a.

**HAPA 540 Autopsy Pathology (Lecture/Laboratory) 4 q.h.**

This course provides an introduction to autopsy pathology and includes instruction in forensic, perinatal and pediatric pathology, as well as pertinent legal issues and history of the autopsy. The laboratory component for this class includes practicing autopsy techniques on cadavers. As the capstone project, students present the pertinent medical findings of their prosections.

**PBBS 540B Neuroscience (Lecture/Laboratory) 4 q.h.**

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 visual aids, laboratory demonstrations and clinical applications. Section B for Pathologists' Assistant students has an interprofessional neuroanatomy focus supplemented with additional material in neuropathology.

**HAPA 553 Seminar IV- Medicine & the Humanities (Lecture/Discussion) 1 q.h.**

This seminar is designed to examine medicine from the perspective of the humanities – specifically the disciplines of the history of medicine, medical anthropology and medical sociology. Perspectives from other disciplines such as literary criticism, film criticism, etc... may also be used.

### **HMTD 551 Leadership in the Healthcare Environment (Lecture) 3 q.h.**

This interprofessional course is designed to introduce the student to the concept of leadership within the healthcare environment. Leadership skills learned as part of previous service activities, sports or academic study will be applied to the healthcare setting using case studies and small group discussion. 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.

### **Second Year - Summer Quarter**

#### **HAPA 630 Anatomic Pathology Clerkship I 12 q.h.**

This is 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 students' skills of gross tissue description, dissection and frozen section preparation in the surgical pathology. In autopsy pathology, emphasis will be placed on autopsy technique including evisceration and block dissection.

### **Second Year - Fall Quarter**

#### **HAPA 631 Anatomic Pathology Clerkship II 12 q.h.**

Continuation of HAPA 630.

### **Second year - Winter Quarter**

#### **HAPA 632 Anatomic Pathology Clerkship III 12 q.h.**

Continuation of HAPA 631.

### **Second Year - Spring Quarter**

#### **HAPA 633 Anatomic Pathology Clerkship IV 12 q.h.**

Continuation of HAPA 632

### **Clinical Affiliates for Pathologists' Assistant Program:**

Advocate Illinois Masonic Hospital - Chicago, IL  
 Advocate Lutheran General Hospital – Chicago, IL  
 Ameripath South Texas – San Antonio, TX  
 Boyce & Bynum Boone Hospital – Columbia, MO  
 California Pacific Medical Center – San Francisco, CA  
 Cardinal Glennon Children's Hospital – St. Louis, MO  
 Central DuPage Hospital – Winfield, IL  
 Centrex Clinical Laboratories, Inc. – Utica NY  
 David Geffen School of Medicine at UCLA – Los Angeles, CA  
 Dynacare Laboratories – Milwaukee, WI  
 Emory Healthcare, Inc. – Atlanta, GA  
 Jackson Health System – Miami, FL  
 John H. Stroger, Jr., Hospital of Cook County – Chicago, IL  
 LMC/Sunrise Hospital – Las Vegas, NV  
 Loyola University Medical Center – Chicago, IL  
 Marshfield Clinic – Marshfield, WI  
 Mercy Hospital – Chicago, IL  
 Methodist Hospital – Houston, TX  
 Mineral Area Regional Medical Center – Farmington, MO  
 Mount Sinai Hospital – Chicago, IL  
 Northwestern Community Hospital – Arlington Heights, IL  
 Resurrection Medical Center – Chicago, IL  
 Rush University Medical Center – Chicago, IL  
 St. Joseph's Hospital – Fort Wayne, IN

St. Mary's Duluth Clinic Health Systems – Duluth, MN  
University of California, San Diego – San Diego, CA  
University of Iowa Hospital and Clinics – Iowa City, IA  
University of Kansas Medical Center – Kansas City,  
KS  
University of Minnesota Fairview – Minneapolis, MN  
University of Nebraska Medical Center – Omaha, NE  
Wellstar Health Systems, Inc. – Marietta, GA

**Department Faculty:**

John E. Vitale, MHS, PA (ASCP)<sup>cm</sup>, Program  
Director, Assistant Professor and Acting Chair  
Lisa L. Dionisi, MS, PA (ASCP)<sup>cm</sup>, Assistant Program  
Director and Instructor  
Osvaldo L. Rubinstein, MD, Medical Director and  
Associate Professor  
Brandi Woodard, MS, PA (ASCP), Director of Clinical  
Education and Instructor  
Daniel Bareither, PhD, Professor  
John Becker, PhD, Associate Professor  
Nathaniel Gray, MS, PA (ASCP) Instructor

## DEPARTMENT OF PHYSICAL THERAPY

### DOCTOR OF PHYSICAL THERAPY PROGRAM

#### General Information

The Department of Physical Therapy at Rosalind Franklin University of Medicine and Science considers its primary mission to be the education of generalist practitioners who are eminently qualified to deliver physical therapy services in current and future health care systems. We recognize that many changes have occurred within the past decade and continue to occur in the physical therapy profession and within the healthcare system. These changes, such as managed care and direct access to physical therapy, have altered our interactions with clients and other healthcare providers.

#### Programmatic Accreditation

To meet the demands of the changing healthcare environment, the Department of Physical Therapy offers a Doctor of Physical Therapy (DPT) degree. This three-year unified and integrated entry-level physical therapy program includes academic, clinical and research components and offers options to explore specialty areas. It is designed to provide an intense, in-depth, and universal view of the profession and its opportunities with an emphasis on critical evaluation and problem-solving skills.

The Doctor of Physical Therapy degree is accredited by the Commission on Accreditation in Physical Therapy Education.

#### Curricular Objectives

The major curricular goal of the entry-level physical therapy program at Rosalind Franklin University of Medicine and Science is to educate a generalist physical therapist who is able to practice effectively, safely and ethically in any type of healthcare delivery environment. The graduate of the DPT program will have a life-long commitment to professional growth and the potential to develop into a master clinician. The graduate will be able to do the following:

1. Conduct the practice of physical therapy in a professional and ethical manner including the recognition and resolution of clinical and ethical dilemmas.
2. Adapt and practice physical therapy effectively within the framework of the changing healthcare delivery system.
3. Provide evaluation and treatment in a safe, independent and effective manner in order to promote optimal motor function. In achieving this outcome, the physical therapist must be able to:
  - a. Differentiate neuromusculoskeletal disorders from other medical disorders.
  - b. Educate, supervise, delegate and consult with other healthcare professionals, patients and families.
4. Critically evaluate the art, science, and practice of physical therapy and make clinical decisions based on sound theoretical, practical, and empirical evidence.
5. Interact with each client with empathy and understanding of the whole person.
6. Demonstrate potential leadership abilities in all aspects of professional life.
7. Demonstrate the value of physical therapy by contributing to and promoting physical therapy practice, research, education, and the profession's contribution to the healthcare system and to the general community.

## Admission Requirements

The Doctor of Physical Therapy Program at Rosalind Franklin University is designed for the self-motivated student who is skilled in critical thinking and willing to be an active participant in group learning situations.

A Bachelor of Arts or Science degree from an accredited college or university is required.

The required prerequisite courses are:

- One year of college English, including composition
- Three courses in the humanities / social sciences to include one course of psychology
- One year each of chemistry, physics, and biology all to include lecture and laboratory components. Physics courses must be sequential.
- One course in anatomy / physiology with laboratory. (Human anatomy / physiology recommended)
- One course in statistics which must include both descriptive and inferential statistics.

The applicant must have earned 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 must have been completed within the last ten years, but recommended within the last five years. At least two-thirds of the science prerequisites should be completed prior to applying to the program.

Applicants are required to complete the Graduate Education Record (GRE) examination within 5 years of application to the program. 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 full time for two consecutive years. An official course evaluation for equivalence report is also required if applicant attended a foreign educational program.

Three letters of recommendation are required from all applicants. One recommendation must be from a licensed physical therapist. The second required letter of recommendation is required from a science, math, or liberal arts professor with rank of Assistant Professor or higher under which the applicant has studied. The applicant may choose an individual for the third recommendation who has supervised work experience or is otherwise uniquely qualified to comment on potential for professional study.

An understanding of the profession of physical therapy is expected. All applicants must have worked or volunteered for a minimum of 40 hours in a physical therapy department or practice.

Computer literacy is required. Computer software requirements and specifications will be provided upon acceptance.

Applications must be submitted through the Physical Therapy Centralized Application Service (PTCAS) beginning July 15. The Department of Physical Therapy also requires the completion of a Supplemental Application which must be submitted to the RFUMS Office of Enrollment Services. Applicants are strongly encouraged to complete the application as well as additional supplemental and ancillary requirements as early

as possible. All completed applications received by October 15 will receive full consideration. Review of applications received after October 15 will continue until December 1 or until the class is full.

Qualified applicants are offered and required to attend an on-campus small group interview to assess interpersonal and communication skills, maturity, and commitment to a career as a physical therapist. The group interview format allows the applicant the opportunity to display the ability to contribute to a group discussion through interaction with other applicants, communication skills, knowledge, and problem-solving ability. A critical thinking examination is also taken on this date.

Admission to the program is competitive. Successful candidates demonstrate a history of strong academic performance in the sciences, superior GRE and critical thinking examination scores, evidence of interpersonal skills, and distinguished letters of recommendation.

## CURRICULAR COMPONENTS

### FIRST YEAR

#### Summer Quarter

##### **MCBA 501 Anatomy 10 q.h.**

This course introduces the student to the critical analysis of structure and function as they relate to selected body systems. Students will have the opportunity to dissect a human cadaver. Prerequisite: Enrollment in Physical Therapy Program.

##### **HPTH 618 Orientation to Physical Therapy 3 q.h.**

This course will explore the healthcare delivery system in general as well as the history of physical therapy, ethical and legal aspects of practice, the current practice of physical therapy in relation to other health services and the PT as practitioner, leader, educator, researcher and critical thinker. Prerequisite: Enrollment in Physical Therapy Program.

##### **HPTH 619 Principles of Education 1 q.h.**

This course introduces students to the teaching and learning process. Students will have the opportunity to write learning objectives, develop content, select teaching methods, and develop and evaluate a learning experience for classmates.

**Prerequisite:** Enrollment in Physical Therapy

Program.

#### Fall Quarter

##### **HPTH 620 Clinical Skills I 5 q.h.**

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 communication, referral services, emergency care, thermotherapy, cryotherapy, ultrasound, patient handling skills, transfers, gait training, and massage. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

##### **HPTH 622 Critical Inquiry I 4 q.h.**

Students are introduced to the elements of thought and the logic of critical thinking. Measurement theory and principles as applied to physical therapy practice and research are studied. The role of the researcher in professional practice is examined. Principles and application of scientific inquiry are emphasized. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

##### **HPTH 623 Practice Issues I 1 q.h.**

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 behavior and clinical decision making are introduced. Evaluation of self, the clinical setting, and clinical faculty is defined. Effective professional communication skills are practiced. Investigation, planning and selection of Summer Quarter Module 5 clinical experience Clerkship I is completed. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 625 Body Systems I 5 q.h.**

The structural, functional and molecular organization of the cardiopulmonary, circulatory, neuromusculoskeletal, and body defense systems in health and disease throughout the life span are presented. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 626 Body Systems II 5 q.h.**

The structural, molecular, and functional organization and embryological development of the integumentary, gastrointestinal, urogenital, endocrine and metabolic, in health and disease throughout the life span are presented. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HMTD 500 Interprofessional Healthcare Teams 1 q.h.**

This course is an experiential learning opportunity for all students at Rosalind Franklin University of Medicine and Science to learn about a collaborative model of care. The students will interact in healthcare teams focusing on patient-centered care emphasizing evidence-based practice, quality improvement strategies and informatics. Prerequisite: Enrollment in DPT program.

#### **Winter Quarter**

#### **HPTH 630 Clinical Skills II 3 q.h.**

This course introduces basic physical therapy

examination, evaluation, and interventions 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, documentation, and posture will be studied. Specific examination, evaluation, and intervention skills for the joints of the upper extremity will be presented. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 631 Clinical Skills III 3 q.h.**

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 pathological gait, posture, and aquatherapy. This course emphasizes comprehensive physical therapy case management including integration of previous Clinical Skills courses. The student will have the opportunity to examine and develop care plans for various patients. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 634 Orthopedic Clinical Medicine 3 q.h.**

Students study orthopedic/musculoskeletal disorders that are commonly addressed by physical therapists. Course material presented 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. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 635 Kinesiology/Motor Control I 3 q.h.**

Principles of tissue mechanics, muscle mechanics, and principles and theories of motor control are

presented, along with methodology for static and dynamic analysis of movement. This information is applied to the prevention and rehabilitation of neuromusculoskeletal disorders. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**HPTH 636 Kinesiology/Motor Control II 4 q.h.**

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 learning and motor control within the context of simple and complex motion analysis for joints of the extremities and spine. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**Spring Quarter**

**HMTD 551 Leadership in the Health Care Environment 3 q.h.**

This course will enable students to develop an understanding of the complex nature of health care facility problems and learn a systematic approach to problem resolution through the group problem solving process. This is an interdisciplinary course, taught in conjunction with the other programs of the College of Health Professions.

**HPTH 640 Clinical Skills IV 5 q.h.**

This course examines a variety of evaluation and treatment techniques used in patient management. Emphasis is on the neurological aspect of dysfunction. Basic concepts and clinical application of electrotherapy are introduced. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**HPTH 642 Critical Inquiry II 3 q.h.**

Descriptive and inferential statistics with relevance to

physical therapy 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. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**HPTH 643 Practice I Issues II 1 q.h.**

This course continues the investigation of clinical education issues and process. Final plans and requirements for the first clinical experience Clerkship I are defined. Professional behaviors are further explored. Evaluation requirements of self, clinical setting, and clinical faculty are explored. Effective professional communication skills are practiced. Investigation, planning, and selection of Winter Quarter Module 7 Clerkship II is completed. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**HPTH 644 Neurological Clinical Medicine and Pharmacology 3 q.h.**

Students study the medical and pharmacological aspects of neurological disorders that are commonly treated by physical therapists. The course is coordinated with Neuroscience and Clinical Skills IV 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 disease, and cerebral vascular accidents. Topics include the etiology, pathology, clinical manifestations, and medical, surgical and pharmacological management. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**PBBS 504 Neuroscience 5 q.h.**

Neuroscience is a comprehensive series of lectures on the structure, neurophysiology, and function of the human nervous system. The lectures are complemented by visual aids, laboratory demonstrations, and clinical applications.

## Second Year

### Summer Quarter

#### **HPTH 717 Clerkship I 6 q.h.**

This is a six-week full-time clinical experience in which the student will participate in a clinical setting with the opportunity for the application of previous didactic learning and professional socialization. This is an orientation to the clinical practice of physical therapy with participation in patient care activities, professional collaboration, professional operations and communication skill development. Students will practice the principles of case reporting, case documentation and medical chart review.

Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

### Fall Quarter

#### **HPTH 720 Clinical Skills V 3 q.h.**

In this course, the students integrate and apply various evaluation and treatment approaches for the patient who exhibits neuromusculoskeletal dysfunction. Manual therapy treatment techniques are presented. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 721 Clinical Skills VI 4 q.h.**

In this course, students integrate, apply and justify various examination and intervention approaches for the patient who exhibits neuromuscular dysfunction. Synthesis of knowledge is emphasized for refinement and modification of assessment and intervention of the complex patient through case studies. Electrotherapeutic principals and application for the complex patient are examined. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 722 Critical Inquiry III 2 q.h.**

This course completes the Critical Inquiry sequence.

Students will review the various research designs. This course will also prepare students for Clerkship II where they will write a case report. Students will have the opportunity to write and present their research project from year 1. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 724 Advanced Clinical Medicine and Pharmacology 5 q.h.**

Clinical medicine topics including pharmacological intervention are integrated with neuromusculoskeletal treatment. Incorporating case studies, the student learns to differentiate between those conditions appropriate for physical therapy intervention and those that require referral to other medical specialists. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 725 Advanced Regional Anatomy 2 q.h.**

Students will examine in-depth the anatomy of various joint regions of the human body. Anatomical images of normal and pathological conditions 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. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

### Winter Quarter

#### **HPTH 737 Clerkship II 12 q.h.**

This is a full-time experience for ten weeks in one or more selected clinical practice settings. It is a supervised experience with the opportunities to synthesize and apply previous learning. Time management skills, ethical decision making, and integration of assessment and goal setting will be emphasized. Incorporation of increasingly varied and adaptable approaches to treatment will be employed. The student is expected to project and predict

outcomes of intervention, and determine the value of various health care services for the existing or potential problems of the patient. A patient-centered case study project will be designed and conducted. Presentation of this research activity will be in Quarter Module 9. The student will begin to explore healthcare arenas and begin to define interests for culminating clinical experiences.

**Prerequisite:** Satisfactory completion of all previous courses in DPT program or approval of faculty.

### Spring Quarter

#### **HPTH 740 Clinical Skills VII 3 q.h.**

The student will further synthesize and analyze the rehabilitation of neuromuscular dysfunction. The emphasis will be on psychosocial issues and modification of interventions. Topics include geriatrics, women's health, lymphedema, oncology, abuse, and preventive behaviors.

**Prerequisite:** Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 741 Pediatric Physical Therapy 4 q.h.**

Advanced patient evaluation and treatment planning skills will be synthesized in reference to the pediatric client. Emphasis will be directed to specific pediatric case studies. The course will include embryology and normal and abnormal development from ages 0–18. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 742 Physical Therapy in the Critical Care Sector 2 q.h.**

A series of lectures will be presented that focus on patients with illnesses requiring critical care and who have multi-system dysfunction, including discussion of examination, evaluation, intervention and outcome strategies within different environments along the continuum of care. The course will also include laboratory sessions to refine patient handling skills and skills related to burn and wound interventions. This course will cover the following topics: Infection

Control, OSHA's Bloodborne Pathogen & Hazardous Communication Standards, Clinical Emergencies, Patient Care in the ICU, Organ Transplantation, Renal Dialysis, Burn & Wound Care, and Grieving, Loss & Hospice. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 743 Practice Issues III 1 q.h.**

This course analyzes clinical experiences from Clerkship I and II. Clinical problems and solutions will be discussed. Ethical dilemmas are addressed. Students will practice effective verbal and nonverbal communication skills. Investigation, design, and selection of clinical experience, Clerkship III, Quarter Module 10, Fall Quarter. Planning, design, and investigation for Clerkship IV, Winter or Spring quarters, Year III are initiated. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 744 Prosthetics/Orthotics 3 q.h.**

The principles of prosthetic and orthotic management will be discussed with emphasis on examination, evaluation, intervention and appropriate referral. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTS 745 Cardiovascular and Pulmonary Physical Therapy 4 q.h.**

This course is a case-based approach to evaluation and treatment of clients with cardiovascular and pulmonary dysfunction. Treatment interventions taught in this course include mobilization, body positioning, ventilatory strategies, breathing control, coughing and airway clearance maneuvers, and manual techniques. Patient education and patient driven treatment planning are fundamental concepts included in this course. Interventions for treatment are correlated to patient examination and evaluation. Discharge planning will be incorporated. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

### **HPTH 746 Special Topics in Physical Therapy 1 q.h.**

This course will provide information regarding specialized topics of rehabilitation. Management of chronic pain will be described through methods within the scope of physical therapy and within the medical model. Students will also be discussing specialized issues related to the following specific topics: management of patients with chronic pain, and those with symptom magnification behavior; upper cervical spine evaluation following acute trauma; components of footwear; ACL reconstruction techniques and appropriate rehabilitation protocols; management of patients with postural abnormalities and scoliosis, and principles of management of patients in a work condition program.

### **Third Year**

#### **HPTH 823 Practice Issues IV 2 q.h.**

This on-campus course concludes the planning and negotiation of the final culminating Clerkship (PT 937) and Professional Practicum (PT 948) experience in the Winter and Spring Quarters of the third year. During the Summer Quarter (Module 9), the student is expected to perform independent work and foster communication with his/her academic advisor and project supervisor to negotiate and finalize the Professional Practicum project. The student will orally present a professional poster describing the case study research project from Clerkship II. The presentation of these studies may also be expected in January at the University Sigma Xi session or at another professional society meeting. Site selections for Clerkship IV will be completed. Guest lectures discussing review techniques for state licensure examinations, resume writing and interviewing, current professional and legislative issues, and current trends in rehabilitation may be presented. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 827 Clerkship III 10 q.h.**

This is a 10 week, full-time, first culminating experience in one or more selected clinical practice settings. It is a supervised experience with the opportunities to synthesize and apply previous learning. The student is expected to be a mature, self-directed learner and demonstrate increasingly competent behaviors in professional interaction, communication, consultation, and management. Time management, ethical decision making, and integration of assessment and goal setting will be emphasized. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 837 Clerkship IV 12 q.h.**

This is a 12-week, full-time experience in one or more selected clinical practice settings. It is a supervised experience with the opportunities to synthesize and apply previous learning. The student is expected to be a mature, self-directed learner and demonstrate increasingly competent behaviors in professional interaction, communication, consultation, and management. Time management, ethical decision making, and integration of assessment and goal setting will be emphasized. The student may have negotiated and designed this clinical experience. The clinical work will be conducted or monitored by an experienced clinician, or perhaps a Certified Clinical Specialist, in the area of interest of the student. The student will be expected to complete all assignments of the clinical site, and to complete all previous research competencies. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

#### **HPTH 848 Professional Practicum 12 q.h.**

The purpose of this course is to give students the opportunity to experience alternative roles in the areas of administration, critical inquiry (research), education, or healthcare policy. The administration

area of study emphasizes the process of planning, evaluating, and managing human and financial resources. The critical inquiry area of study emphasizes the process of applying the principles of scientific methods to a research project. The education area of study emphasizes the process of planning, delivering, and evaluating teaching activities. The healthcare policy area of study emphasizes the formulation, legislative process, implementation, and analysis of new and existing healthcare policy. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**HPTH 843 Practice Issues V 1 q.h.**

This two week seminar includes guest presentations, student presentations, faculty panels, University awards, and concludes in the graduation ceremony. It occurs at the end of Spring Quarter, Year 3. Students will present their experiences and activities from PT 948, Professional Practicum. Students will correlate and assemble all documents required for the faculty to approve their completion of degree requirements. Faculty advisors must be consulted on an individual basis for exit information. Students will also meet with their research portfolio adviser to finalize the portfolio's components. The students will also meet with representatives from the financial aid office to discuss necessary procedures and topics prior to graduation. Guest lectures discussing current professional and legislative issues and practice trends in rehabilitation will be presented. Students will have the opportunity to participate in the National Physical Therapy Examination preparation course. Students will evaluate the curriculum at this culminating point. Prerequisite: Satisfactory completion of all previous courses in DPT program or approval of faculty.

**HPTH 500 Zero Hour Registration 0 q.h.**

A course designation for students pursuing individual academic activities.

## POST-PROFESSIONAL DOCTOR PHYSICAL THERAPY PROGRAM

### General Information

Recently, rapid and pervasive changes have occurred in the healthcare environment due to managed care. Physical therapists must possess the knowledge, skills and attitudes for effective, quality patient care in our highly competitive environment where diagnosis, evidence-based practice, cost constraint and increased productivity are all considered essentials. Recognizing recent healthcare changes, the APTA has developed the APTA 2020 Vision Statement encouraging physical therapists to meet the challenges of current and future healthcare practice as independent doctorally trained practitioners.

As a University and department committed to the mission of educating healthcare practitioners to their highest level, the Department of Physical Therapy has developed a transition doctorate in physical therapy to assist practicing physical therapists to augment their previously acquired knowledge with coursework focused toward future practice trends. The Post-Professional Doctor of Physical Therapy program is designed for the self-motivated, licensed physical therapist wishing to maximize their learning time in a non-traditional environment. The program is intended to augment knowledge, skills and behaviors from the clinician's professional education, to promote practice, to refine professional leadership skills, and to advance scientific inquiry skills commensurate with contemporary and future practice trends. The program is offered as an online, distance program only one weekend on campus attendance required in conjunction with HPPT: Advanced Clinical Practice.

### Student Outcomes

In conjunction with the Department of Physical Therapy mission statement, the overall goal of the Post-Professional Doctor of Physical Therapy (PDPT) program is to provide practicing clinicians with the opportunity to augment their previously acquired patient care knowledge, skills and abilities, to engage in societal and professional leadership and to pursue scientific inquiry and scholarly activity commensurate with contemporary and future practice trends.

Specifically, graduates will:

1. Recognize and respond to economic and market trends in the delivery of physical therapy services to diverse populations.
2. Negotiate and advocate for physical therapy services within health delivery systems (e.g., reimbursement, legal and ethical issues, regulatory standards, outcomes, and resources), throughout the continuum of care.
3. Contribute to processes that generate evidence and consensus about the efficacy and effectiveness of physical therapy practice.
4. Practice as a first-contact practitioner in the delivery of care throughout the life span.
5. Be an influential leader in shaping policy related to healthcare systems and organizations.
6. Integrate the cultural and socioeconomic and biopsychosocial factors that impact the management and delivery of physical therapy services.
7. Service the public as the primary resource, educator, and consultant regarding physical therapy-related health, prevention, and wellness information.

8. Serve as a professional role model, educator and mentor for healthcare providers, students and others.
9. Progress along the continuum of practice toward becoming a master clinician.
10. Contribute to the body of knowledge of physical therapy practice by participating in the ongoing development of classification systems, examination procedures, screening tools, and evidence-based practice interventions.
11. Collect and analyze data on management systems to enhance outcomes of PT services.
12. Provide leadership in the healthcare delivery system for ethical, professional and legal physical therapist practice.
13. Refer appropriately to other medical practitioners.

### **Admission Procedures and Requirements**

The Post-Professional Doctor of Physical Therapy program at Rosalind Franklin University of Medicine and Science is designed for the self-motivated physical therapist wishing to maximize their learning time in a non-traditional environment.

Requirements for application are:

- Master of Science in Physical Therapy, Bachelor of Science in Physical Therapy or a Bachelor of Science and a Certificate in Physical Therapy from an APTA accredited physical therapy program.
- Master of Science in Physical Therapy, Bachelor of Science in Physical Therapy or a Bachelor of Science and a Certificate in Physical Therapy from an APTA accredited physical therapy program.
- Official transcripts from all colleges and universities attended.
- Two official letters of recommendation from individuals who were involved in the student's previous educational, clinical or work experience or their current employment.
- A license to practice physical therapy in the United States
- Applicants from institutions outside the United States must have had their international credentials evaluated prior to taking their licensure examination. They must be licensed and practicing in the United States.
- The 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 full time for two consecutive years.
- Students can petition to receive credit for the successful completion of selected coursework, clinical specialization, or related experience.
- Admission to the program is competitive. Class members are selected on the basis of academic records, application, and letters of recommendation. Applications are reviewed on an ongoing basis.
- Computer literacy is required. Computer software requirements and specifications will be provided upon acceptance.

### **Requirements for the Degree:**

- 42 quarter hours (q.h.)
- A Comprehensive Project
- A GPA of 3.0 or better

## CURRICULAR COMPONENTS

### PROGRAM OF STUDY

The program of study includes both required and elective elements which must total 42 q.h. The faculty recommends taking two courses per quarter in order to finish in a timely fashion, however, the student may select additional courses as appropriate. The program is structured to include learner-focused activities delivered primarily through a distance education experience. Both computer-based and mail-based formats will be utilized. A typical program of study is as follows:

#### Year 1

##### Fall

Critical Skills in Cyberspace	3 q.h.
Evidence-Based Practice	3 q.h.*

##### Winter

Anatomical Imaging	3 q.h.*
--------------------	---------

##### Spring

Nutrition	3 q.h.
PT Examination: Screening for Disease	3 q.h.*

##### Summer

Pharmacology	3 q.h.*
Advanced Practice Course	3 q.h.*
Exercise Physiology	3 q.h.

#### Year 2

##### Fall

Healthcare Delivery Leadership	3 q.h.*
-----------------------------------	---------

##### Winter

Alternative Medicine	3 q.h.
Pain	3 q.h.

##### Spring

Clinical Biomechanics	3 q.h.
Management	3 q.h.
Complementary Medicine	3 q.h.

### Electives

Independent Study	(var. q.h.)
Measurement and Statistics	3 q.h.
Clinical Practicum	6 q.h.
Research Practicum	6 q.h.
Administration Practicum	6 q.h.
Education Practicum	6 q.h.
Critical Skills in Cyberspace	3 q.h.
Computer Applications	3 q.h.

\*Required Course

### COURSE DESCRIPTIONS

Basic principles of biometry and applied statistical methods using current computer software.

#### HPPT 500 Statistics 3 q.h.

#### HNUT 504 Critical Skills in Cyberspace 3 q.h.

Introduces the student to Internet browsing software. Skills emphasized include "surfing" the Internet, evaluating World Wide Web sites, basic Web site design and development, completing effective Internet and online literature database searches and reviewing health related Web sites.

#### HPPT 506 Evidence Based Practice 3 q.h.

An introduction to the utilization of best evidence in the practice of Physical Therapy. After covering the development of clinical questions, the course moves into how to identify databases and use searching strategies to find evidence. Finally, it covers the application of the evidence in the clinical practices setting.

#### HPPT 521 Management 3 q.h.

A course covering an overview of the planning, controlling and evaluating process for managers. The self-study materials will concentrate on the use of management objectives in the planning, controlling

and evaluation process.

### **HHCM 522 Health Care Delivery 3 q.h.**

The historical evolution of health services provides a backdrop for the core focus of this course: the study of healthcare regulation. 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. A course designed to introduce the student to the current structure of the health care delivery system and its impact on physical therapy services.

### **HCLS 532 Instructional Design 3 q.h.**

A course designed to aid with planning, implementing and evaluating academic courses, as well as in-service programs. Methods and models for design and realistic evaluation models, as well as criteria and selection of audiovisual aids are included.

### **HNUT 540 Nutrition 3 q.h.**

A course covering a broad range of the theory and application of nutritional support in the treatment of disease. Included is the importance of nutritional health promotion and the role of vitamins, minerals and other bioactive substances.

### **HPPT 700 Alternative Medicine 3 q.h.**

A course exploring the history, theory and scope of practice of alternative and complementary health therapies, including Chinese Medicine, Tai Chi, yoga and acupuncture.

### **HPPT 720 Physical Therapy Examination: Screening for Disease 3 q.h.**

This course introduces the students to screening

patients for medical disease. The students will learn screening methods for identifying possible general health and/or system dysfunctions. Students will interpret and evaluate information gathered and decide whether physical therapy intervention is appropriate and/or the need for further referral.

### **HPPT 732 Anatomical Imaging 3 q.h.**

This course covers basic principles and interpretation of imaging modalities as they apply to the field of physical therapy. The emphasis is on plain film radiography and how you can benefit as a physical therapist from an increased understanding of these images. Other types of imaging such as Magnetic Resonance Imaging (MRIs) and Computed Tomography will also be introduced, but the scope of this course will be directed towards plain film radiography.

### **HPPT 742 Measurement 3 q.h.**

A course designed to help students understand the principles of measurement theory as applied to physical therapy. Opportunity to explore the reliability and validity of measurement instruments of their choice.

### **HPPT 745 Computer Applications 3 q.h.**

Introduces the student to basic skills required to use word processing, presentation, and spreadsheet software packages. A partial list of topics addressed in the course include: Word processing software: document handling, formatting tables, inserting objects; presentation software: creating slides and handouts, formatting, transitions, inserting objects; spreadsheet software: data entry and formatting, formulas, creation of charts, tables, and graphs. These skills are taught through the completion of self-instructional, computer-based assignments.

### **HPPT 751 Clinical Biomechanics 3 q.h.**

A course examining the structure and function of the various connective tissues that comprise human articulations. Principles of biomechanics and kinetics.

Clinical relevance of connective tissue and joint mechanics as related to functional activities will be included.

### **HPPT 753 Exercise Physiology 3 q.h.**

A course covering the acute and chronic effects of exercise and training on cellular function, energy production, enhancement of energy capacity as well as the function of the cardiovascular, pulmonary, musculoskeletal and nervous systems.

### **HPPT 662 Topics in Pain 3 q.h.**

An online course that provides a comprehensive overview of the multidimensional phenomenon of pain, to include: definitions; terminology; ethical considerations; contemporary research; theoretical foundations (philosophical, cultural, psychological, spiritual, anatomical, and neurophysiological); assessment; prevention; and holistic and collaborative management of pain with emphasis on the role of the physical therapist.

### **HPPT 870 Independent Study 3 q.h.**

An individualized independent learning experience which may include, but not be limited to the following:

1. Summary of the literature on a special topic
2. Specialized study of clinical techniques in an area of special emphasis
3. Special objectives and treatment for a particular patient group.

### **HPPT 880 Practicum 6 q.h.**

An intensive internship experience in the student's local area. May be clinical, research, administrative or educational in nature.

### **HPPT 699 Zero Hour Registration 0 q.h.**

A course designation for students pursuing individual academic activities.

### **HPPT 722 Advanced Clinical Practice 3 q.h.**

Is a required experience in the curriculum. It deals with best practices as identified in the *Guide to*

*Physical Therapy Practice*. Specific sections include physical therapy practice and management of patients with impairments in the Cardiovascular and Pulmonary, Neurological, Musculoskeletal and Integumentary Systems. In addition cutting edge Wound Care and Lymphedema interventions are presented.

The culmination of the course is an on-campus weekend in which students prepare case studies in one of the areas and present back to the class to demonstrate best practice and evidence based examination and intervention. Emphasis is on the integration of research and evidence in the area of study. The core physical therapy faculty serve as discussants for the case studies in their particular area of expertise. A culminating lecture, which integrates the multi-system examination, is required and students practice the advanced manual and problem-solving skills required for clinical practice.

## MASTER OF SCIENCE PROGRAM IN PHYSICAL THERAPY

### Admission Procedures and Requirements

The purpose of the Master of Science Program in Physical Therapy is to prepare future leaders of the profession. Leaders with advanced knowledge, research skills and clinical competencies are needed in education and in the organization and delivery of physical therapy services. The program at Rosalind Franklin University of Medicine and Science provides opportunities for physical therapists to interact in an intellectual atmosphere where they can rigorously and objectively examine all aspects of professional practice. The graduate program is designed to foster a high level of skill in the inquiry process, increase the depth of knowledge in a student-selected aspect of physical therapy, enhance techniques for life-long self-education and promote dedication to the advancement of physical therapy. It is hoped that the graduate will contribute significantly to the healthcare system and society.

### Admission Procedures and Requirements

Requirements for application are:

1. The student must have graduated from an approved school of physical therapy and be eligible for licensure in the State of Illinois.
2. The student must have a minimum grade point average of 2.5 on a 4.0 scale.
3. The student must furnish three letters of recommendation from individuals who were involved in the student's previous educational and clinical experience.
4. A personal interview with a faculty member in the department of physical therapy is required.
5. A TOEFL exam score within the last two years is required if you are a foreign applicant who is from a foreign country where English is not the primary language, and you have not attended a university/college in the U.S. for two consecutive years.
6. Students from institutions outside the United States must have an international credentials evaluation sent from a U.S. Evaluation Agency.

### Requirements for the Degree

1. A minimum of 40 quarter hours of graduate credit is required. Students are expected to complete required core courses as well as specialty courses.
2. Each degree candidate must complete and successfully defend a research project.
3. The student must maintain an overall grade point average of 3.0 (B).

### Curricular Components

#### Program of Study

The program of study includes three components: core courses, specialty courses and a master's thesis. Classes meet one day per week to meet the needs of the part-time student who must maintain employment. Several courses will be offered each quarter depending on the availability of faculty. The program is intended to be completed in a total of 7 quarters. The faculty recommends that the student takes two courses per quarter in order to finish in a timely fashion. A student may elect to take a more flexible program, however, they are reminded that not all required courses are offered every year. If a student wishes to declare a specialty, a minimum of 3 courses must be chosen from that specialty area.

**REQUIRED COURSES (minimum 10 q.h.)**

HPTH 502 Physical Therapy Seminar 1 q.h.  
 HNUT 520 Leadership Skills 3 q.h.  
 HPTH 506 Educational Issues 3 q.h.  
 HNUT 512 Health Care Delivery 3 q.h.

**REQUIRED COURSEWORK RESEARCH (minimum 9 q.h.)**

HPTH 516 Measurement in Physical Therapy 3 q.h.  
 HPTH 517 Critical I 3  
 HPTH 518 Critical

**REQUIRED COURSEWORK – MASTER’S THESIS**

HPTH 559 Master’s Thesis 3 q.h.

**COURSEWORK – SPECIALTY****Orthopedic Specialty**

HPTH 550 Regional Dissection of the Human Body  
 (Var q.h.)  
 HPTH 551x Clinical Biomechanics (3 q.h.)x  
 HPTH 553 Exercise Physiology & Nutrition 3 q.h.  
 HPTH 554 Advanced Approaches to Manual Therapy  
 3 q.h.  
 HPTH 560 Journal Club 1 q.h.  
 HPTH 562 Pain 3 q.h.  
 HPTH 570 Independent Study (Var 1.h.)

**Neurological Specialty**

HPTH 550 Regional Dissection of the Human Body  
 (Var q.h.)  
 HPTH 553 Exercise Physiology 3 q.h.  
 HPTH 560 Journal Club 1 q.h.  
 HPTH 561 Advanced Neurological Physical Therapy  
 3 q.h.  
 HPTH 562 Pain 3 q.h.  
 HPTH 570 Independent Study (Var q.h.)

**Education/Administration Specialty**

HPTH 505 Problem Solving Techniques for the  
 Physical Therapist 3 q.h.  
 HPTH 507 Management by Objectives 1 q.h.  
 HPTH 508 Communication Techniques/Group  
 Dynamics 2 q.h.

HPTH 509 Analyzing and Improving Performance  
 2 q.h.  
 HPTH 510 Evaluating Clinical Competence 3 q.h.  
 HPTH 514 Administration Seminar 2 q.h.  
 HPTH 515 Education Seminar 1 q.h.  
 HPTH 575 Teaching Internship (Var q.h.)

**General Electives**

HPTH 511 Financial Management 3 q.h.  
 HPTH 556 Cardiopulmonary Physical Therapy  
 3 q.h.  
 HCLS 680 Fundamentals of Epidemiology 3 q.h.  
 HPTH 580 Rasch Analysis 1 q.h.  
 HPTH 585 Research Techniques (Var q.h.)

**COURSE DESCRIPTIONS****REQUIRED COURSES****HPTH 502 Physical Therapy Seminar 1 q.h.**

Research on selected physical therapy topics will be reviewed and discussed with emphasis on critical evaluation of the published literature.

**HNUT 520 Leadership Skills for Supervisors 3 q.h.**

This graduate course is designed to provide the clinical supervisor with theory and skills in areas of leadership, management, communication, motivation, interviewing, discipline and legal guidelines. The student will develop skills through lecture, discussion, group projects and case studies.

**HPTH 506 Educational Issues 3 q.h.**

Designed to aid with planning, implementing and evaluating courses, as well as in service programs. Methods and models for design and realistic evaluation models, as well as criteria and selection of audiovisual aids are included.

**HNUT 512 Health Care Delivery 3 q.h.**

Introduction to the current structure of the healthcare delivery system and its impact on physical therapy

services.

**HPTH 516 Measurement in Physical Therapy  
2 q.h.**

Designed to help students understand the principles of measurement theory as applied to physical therapy. Opportunity to explore the reliability and validity of measurement instruments of their choice.

**HPTH 517 Critical Inquiry I 3 q.h.**

Fundamentals of the research process with the opportunity to develop a research proposal.

**HPTH 518 Critical Inquiry II 3 q.h.**

Basic principles of biometry and statistical methods with applications to current computer software.

**HPTH 599 Master's Project (q.h. to be arranged)**

An individual research topic with the approval of the major advisor. An in-depth study to include identification of a problem, sample selection, data collection, data processing, research design, evaluation and conclusions.

**Orthopedic Electives**

**HPTH 550 Regional Dissection of the Human Body (q.h. to be arranged)**

Designed for students who wish to pursue a detailed study of the gross anatomy of specific areas of the human body. Orthopedic specialty students focus on joint or spinal anatomy. Dissections will be supervised and special reading assignments will be made. A laboratory fee will be based upon the number of students registered and the region(s) of the body to be studied.

**Prerequisite:** Gross Anatomy.

**HPTH 551 Clinical Biomechanics of the Musculoskeletal System 3 q.h.**

Examination of the structure and function of the various connective tissues that comprise human articulations. Principles of biomechanics, and

arthrokinematics of selected regional articulations. Clinical relevance of connective tissue and joint mechanics as related to functional activities.

**HPTH 553 Exercise Physiology & Nutrition 3 q.h.**

Acute and long-term effects of exercise on the function of the major organ systems of the body. Emphasis is placed on the cardiorespiratory, musculoskeletal, and nervous systems. State-of-the-art assessment techniques and the application of the results to the development of prescribed programs for 1) the enhancement of physical fitness in adults and 2) specialized training of athletes. Lecture/lab.

**HPTH 554 Advanced Approaches to manual Therapy 3 q.h.**

Designed to explore and practice some of the advanced approaches in manual therapy, such as joint mobilization, craniosacral therapy, myofascial release, or other techniques. Lecture/lab.

**HPTH 560 Journal Club 1 q.h.**

Current topics of the designated area will be selected from approved journals. Students will choose an approved topic, do the necessary library research, and arrange a presentation, complete with a lecture outline and references. Alternatively, guest lecturers speak on special topics. Lecture/discussion format.

**HPTH 562 Pain 3 q.h.**

Comprehensive overview of the multidimensional phenomenon of pain; to include definitions, terminology, ethical considerations, contemporary research, theoretical foundations (philosophical, cultural, psychological, spiritual, anatomical and neurophysiological), assessment, prevention, and holistic and collaborative management of pain with emphasis on the role of the physical therapist.

**HPTH 570 Independent Study 2 q.h.**

Independent learning may include, but not be limited to the following:

- Review of literature.

- Clinical study in the student's area of interest.
- Additional anatomical dissection of special emphasis.
- Field experience with clinical mentor.
- Special evaluation and treatment for a particular patient group.

### **Neurological Electives (q.h. to be arranged)**

Designed for students who wish to pursue a detailed study of the gross anatomy of specific areas of the human body. Dissections will be supervised and special reading assignments will be made. A laboratory fee will be based upon the number of students registered and the region(s) of the body to be studied. Prerequisite: Gross Anatomy.

### **HPTH 550 Regional Dissection of the Human Body (q.h. to be arranged)**

(q.h. to be arranged) Designed for students who wish to pursue a detailed study of the gross anatomy of specific areas of the human body. Dissections will be supervised and special reading assignments will be made. A laboratory fee will be based upon the number of students registered and the region(s) of the body to be studied.

**Prerequisite:** Gross Anatomy.

### **HPTH 553 Exercise Physiology & Nutrition 3 q.h.**

Acute and long-term effects of exercise on the function of the major organ systems of the body. Emphasis is placed on the cardiorespiratory, musculoskeletal, and nervous systems.

State-of-the-art assessment techniques and the application of the results to the development of prescribed programs for 1) the enhancement of physical fitness in adults and 2) specialized training of athletes. Lecture/lab.

### **HPTH 560 Journal Club 1 q.h.**

Current topics of the designated area will be selected from approved journals. Students choose an approved topic, do the necessary library research

and arrange a presentation, complete with a lecture outline and references. Alternatively, guest lecturers will speak on special topics. Lecture/discussion format.

### **HPTH 561 Advanced Neurological Physical Therapy 3 q.h.**

A didactic and practical course presenting advanced theories of current neurological approaches designed to maximize clinical skills in the treatment of the neurological patient.

### **HPTH 562 Pain 3 q.h.**

Comprehensive overview of the multidimensional phenomenon of pain; to include definitions, terminology, ethical considerations, contemporary research, theoretical foundations (philosophical, cultural, psychological, spiritual, anatomical and neurophysiological), assessment, prevention, and holistic and collaborative management of pain with emphasis on the role of the physical therapist.

### **HPTH 570 Independent Study (q.h. to be arranged)**

Independent learning may include, but not be limited to the following:

- Review of literature.
- Clinical study in the student's area of interest.
- Additional anatomical dissection of special emphasis.
- Field experience with clinical mentor.
- Special evaluation and treatment for a particular patient group.

### **Education/Administration Electives**

### **HPTH 505 Problem-Solving Techniques for the Physical Therapist 3 q.h.**

Techniques to identify and solve problems and develop skills for improved management and group dynamics.

**HTPH 507 Management by Objectives – Independent Study Elective 1 q.h.**

An overview of the planning, controlling and evaluating process for managers. The self-study will concentrate on the use of management objectives in the planning, controlling and evaluation process.

**HPTH 508 Communication Techniques and Group Dynamics 2 q.h.**

Designed for the management-education student in order to provide an overview of communication techniques, counseling skills, interviewing techniques and the psychology of groups and group dynamics.

**HPTH 509 Analyzing and Improving Performance 2 q.h.**

Designed for the manager-educator as an in-depth study of motivation as it relates to students and employees. Theories and techniques for motivating problem students and employees. Discipline and related legal issues are covered.

**HPTH 510 Evaluating Clinical Competence 3 q.h.**

Designed to provide the manager-educator with in-depth skills in evaluation of performance. Written testing, evaluation based on performance objectives and related assessment and evaluation skills.

**HPTH 514 Administration Seminar 2 q.h.**

A discussion group covering selected topics in administration. Journal articles are reviewed and discussed.

**HPTH 515 Education Seminar 1 q.h.**

A discussion group covering current topics in literature related to education of allied health professionals.

**HPTH 575 Teaching Internship (q.h. to be arranged)**

An opportunity to actively participate in a course within the PT Department under the guidance of the

course instructor. Experiences may include lecture design and implementation, exam construction, lab assisting, or other appropriate activities based on the course requirements and preferences of the instructor.

**General Electives**

**HPTH 511 Financial Management (Formerly Essentials of Business) 3 q.h.**

An overview describing major components of an operational budget, factors considered in volume forecasting, defining major capital equipment, factors considered in revenue budgeting and rate setting, and budget development, monitoring and approval.

**HPTH 556 Cardiopulmonary Physical Therapy 3 q.h.**

The course is a graduate-level survey of cardiopulmonary issues in Physical Therapy. The cardiopulmonary literature is reviewed within the concepts of patient care over the life span. Current advances in technology are discussed.

**HCLS 680 Fundamentals of Epidemiology 3 q.h.**

Presentation of concepts and methods of epidemiology as they are applied to a variety of disease problems. Emphasis on the integration of biological and statistical elements of specific diseases.

**HPTH 580 Rasch Analysis 1 q.h.**

An overview of the use of the Rasch Analysis for the development and evaluation of assessment instruments.

**HPTH 585 Research Techniques (q.h. to be arranged)**

A laboratory experience with either an established basic science or clinical science investigator. The student must commit to full participation in the laboratory work as determined by the investigator.

**CLERKSHIP AFFILIATION SITES\*****DEPARTMENT OF PHYSICAL THERAPY**

Accelerated Rehabilitation (Chicago, IL)  
 A.C.I.C. (Irvine, CA)  
 Adventist Health (Portland, OR)  
 Alexian Brothers Medical Center (Elk Grove Village, IL)  
 Arizona Orthopedic Physical Therapy 9Goodyear, AZ)  
 Athletico Sports Medicine and PT (LaGrange, IL)  
 Barrington Rehabilitation and Sports Physical Therapy (Barrington, IL)  
 Baycliff Health Camp (Marquette, MI)  
 Beloit Memorial Hospital (Beloit, WI)  
 BroMenn Lifecare Center (Bloomington, IL)  
 Buffalo Grove PT and Sports Rehab, P.C. (Buffalo Grove, IL)  
 Carle Foundation Hospital (Champaign, IL)  
 Cary Physical Therapy (Cary, IL)  
 Central DuPage Hospital (Winfield, IL)  
 Central Wisconsin Center for the Developmentally Disabled (Madison, WI)  
 Centre for Neuro Skills (Irving, TX)  
 Chicago Public Schools (Chicago, IL)  
 Children's Hospital of Illinois (Peoria, IL)  
 Children's Hospital Medical Center (Cincinnati, OH)  
 Children's Memorial Hospital (Chicago, IL)  
 Advocate Christ Hospital (Oak Lawn, IL)  
 Cleveland Clinic Foundation (Cleveland, OH)  
 Columbia Hospital (Milwaukee, WI)  
 Community Hospital (Munster, IN)  
 Concentra Occupational Medical Center (Milwaukee, WI)  
 Advocate Condell Memorial Hospital (Libertyville, IL)  
 Coney Island Hospital (Brooklyn, NY)  
 Copley Memorial Hospital (Aurora, IL)  
 Covenant Rehabilitation Services (Milwaukee, WI)  
 Currative Rehabilitation Center (Milwaukee, WI)  
 Delnor Community Hospital (Geneva, IL)  
 Dwight Orthopedics (Canton, MI)  
 Easter Seal Rehabilitation Center of Will-Grundy Counties (Joliet, IL)

Edward Hospital (Naperville, IL)  
 Eisenhower Medical Center (Rancho Mirage, CA)  
 Elmhurst Memorial Hospital (Elmhurst, IL)  
 Evanston Hospital (Evanston, IL) NSUHS  
 Fairfield Medical Center (Lancaster, OH)  
 Genesis Medical Center (Davenport, IA)  
 Gillette Children's Hospital (St. Paul, MN)  
 Glenbrook Hospital (Glenview, IL) NSUHS  
 Advocate Good Samaritan Hospital (Downers Grove, IL)  
 Advocate Good Shepherd Hospital (Barrington, IL)  
 Gottlieb Hospital (Melrose Park, IL)  
 Great Plains Sports Medicine and Rehab (Peoria, IL)  
 Gulf Coast Aquatic & Rehab Center (Crystal River, FL)  
 Highland Park Hospital (Highland Park, IL) NSUHS  
 Hinsdale Hospital (Hinsdale, IL)  
 Holy Cross Hospital (Chicago, IL)  
 Holy Family Health Center (Des Plaines, IL)  
 Howard Head Sports Medicine (Vail, CO)  
 Advocate Illinois Masonic Medical Center (Chicago, IL)  
 Ingalls Memorial Hospital (Harvey, IL)  
 Iowa Veterans Home (Marshalltown, IA)  
 John H. Stroger, Jr., Hospital of Cook County (Chicago, IL)  
 Johnston R. Bowman Center (Chicago, IL)  
 Jupiter Medical Center-Rehab Services (Jupiter, FL)  
 Kamin Physical Therapy, Inc. (Park Ridge, IL)  
 LaGrange Memorial Hospital (LaGrange, IL)  
 Lake Forest Health & Fitness Institute (Lake Forest, IL)  
 Lake Forest Hospital Outpatient Center (Gurnee, IL)  
 La Rabida Children's Hospital (Chicago, IL)  
 Laremont School (S.E.D.O.L.) (Gages Lake, IL)  
 Little Company of Mary Hospital (Evergreen Park, IL)  
 Loyola University Hospital and Medical Center (Maywood, IL)  
 Advocate Lutheran General Hospital (Park Ridge, IL)  
 Advocate Lutheran General Sports Medicine Center (Maywood, IL)  
 MacNeal Hospital (Berwyn, IL)  
 Marian Franciscan Center (Milwaukee, WI)

Marianjoy Rehabilitation Center (Wheaton, IL)  
 Mayo Clinic (Rochester, MN)  
 Medical College of Virginia Hospitals (Richmond, VA)  
 Memorial Health Systems (Springfield, IL)  
 Memorial Hospital of Carbondale (Carbondale, IL)  
 Memorial Medical Center (Woodstock, IL)  
 Mercy Hospital and Medical Center (Chicago, IL)  
 Mercy on Pulaski (Chicago, IL)  
 Methodist Hospital of Gary (Gary, IN)  
 Methodist Hospital of Indiana (Indianapolis, IN)  
 Midwest Physical & Hand Therapy Center  
 (Schaumburg, IL)  
 Mt. Sinai Hospital (Chicago, IL)  
 Naval Hospital (Great Lakes, IL)  
 Neuro-Ortho Rehab Center (Bloomington, IL)  
 New Ulm Medical Center (New Ulm, MN)  
 North Suburban Special Education District  
 (Highland Park, IL)  
 Northern Illinois Medical Center (McHenry, IL)  
 Northwest Community Hospital (Arlington Heights, IL)  
 Northwest Physical Therapy Services (Seattle, WA)  
 Northwest Suburban Special Education District  
 (Palatine, IL)  
 Northwestern Memorial Hospital (Chicago, IL)  
 NovaCare (Alsip, IL)  
 Oak Forest Hospital (Oak Forest, IL)  
 Oak Park Hospital (Oak Park, IL)  
 OSF St. Joseph Medical Center (Bloomington, IL)  
 OSF St. Mary Medical Center (Galesburg, IL)  
 Palos Community Hospital (Palos Heights, IL)  
 Pathways (Glenview, IL)  
 Paulson Rehab Center (Willowbrook, IL)  
 Pediatric Place (Libertyville, IL)  
 Physiotherapy Associates (Fort Wayne, IN)  
 Provena Mercy Center for Health Care Services  
 (Aurora, IL)  
 Providence Alaska Medical Center (Anchorage, AK)  
 Ravenswood Hospital Medical Center (Chicago, IL)  
 Rehabilitation Hospital of Indiana (Indianapolis, IN)  
 Rehabilitation Institute of Chicago (Chicago, IL)  
 Rehabilitation Services Network (Chicago, IL)  
 Resurrection Hospital (Chicago, IL)  
 Rhode Island Rehab Institute (Cranston, RI)  
 Rush-Presbyterian - St. Luke's Medical Center  
 (Chicago, IL)  
 Sacred Heart Rehabilitation Institute (Milwaukee, WI)  
 Schwab Rehabilitation Center (Chicago, IL)  
 Sherman Hospital (Elgin, IL)  
 Shriners Hospital for Crippled Children (Chicago, IL)  
 Skokie Hospital (Skokie, IL) NSUHS  
 Southern Lakes Therapeutics (Burlington, WI)  
 Southport Rehab Associates, Inc. (Kenosha, WI)  
 Special Education District of McHenry County  
 (Woodstock, IL)  
 Sports PT of Kenosha (Kenosha, WI)  
 St. Alexius Medical Center (Hoffman Estates, IL)  
 St. Catherine's Hospital (Kenosha, WI)  
 St. Francis Hospital (Evanston, IL)  
 St. Francis Hospital (Milwaukee, WI)  
 St. James Hospital (Pontiac, IL)  
 St. John's Medical Center (Springfield, IL)  
 St. Joseph Hospital (Chicago, IL)  
 St. Joseph Hospital (Joliet, IL)  
 St. Joseph Hospital (Milwaukee, WI)  
 St. Joseph Hospital (Phoenix, AZ)  
 St. Joseph Medical Center (Ft. Wayne, IN)  
 St. Joseph Medical Center (Bloomington, IL)  
 St. Joseph Physical Rehab & Sports Injury Center  
 (Joliet, IL)  
 St. Joseph Rehab & Fitness (Chicago, IL)  
 St. Joseph's Hospital-Acute Care (Milwaukee, WI)  
 St. Joseph's Hospital (Denver, CO)  
 St. Vincent's Hospital (Indianapolis, IN)  
 Swedish American Hospital (Rockford, IL)  
 Swedish Covenant Hospital (Chicago, IL)  
 Texas Children's Hospital (Houston, TX)  
 360 Balance (Austin, TX)  
 University of Chicago Hospital (Chicago, IL)  
 University of Illinois Hospital (Chicago, IL)  
 University of Iowa Hospital and Clinic (Iowa City, IA)
 

- VA Hospital (Chicago, IL)
- VA Hospital (Hines, IL)
- VA Medical Center (North Chicago, IL)

 Vista Victory Memorial Hospital (Waukegan, IL)  
 Weiss Memorial Hospital (Chicago, IL)  
 West Allis Memorial Hospital (West Allis, WI)

West Seattle Physical Therapy (Seattle, WA)  
West Suburban Hospital (Oak Park, IL)  
Westlake Community Hospital (Melrose Park, IL)  
Wishard Memorial Hospital (Indianapolis, IN)

*\* sites are subject to change*

### **Faculty**

Roberta Henderson, PT, PhD, Associate Professor  
and Chair  
Wendy Rheault, PT, PhD, Professor  
Judith Stoccker, PT, PhD, Associate Professor  
Jeffrey Damaschke, PT, DPT, MS, OCS  
Donna Frownfelter, PT, DPT, MA, CCS, EET,  
Assistant Professor  
Kelly Hawthorne, PT, DPT, GCS, Assistant Professor  
Heather Henderson, PT, DPT, NCS, Assistant  
Professor  
Diana Hunter, PT, PhD, Assistant Professor  
Matthew Nuciforo, PT, DPT, OCS, CSCS, Assistant  
Professor  
Mary Rahlin, PT, MS, PCS, Assistant Professor  
Karen Stevens, PT, DPT, OCS, Assistant Professor  
Rosanne Thomas, PT, PhD, Associate Professor  
Susan Tappert, PT, DPT, MS, Assistant Professor

## PHYSICIAN ASSISTANT DEPARTMENT

### MASTER OF SCIENCE IN PHYSICIAN ASSISTANT PRACTICE (ENTRY-LEVEL PROFESSIONAL PROGRAM)

#### General Information

**Degree Offered:**

Master of Science in Physician Assistant Practice

**Program Attendance Options:**

Full-time only

**Program Length:**

24 months

**PA Program Accreditation**

Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA), 12000 Findley Road, Suite 240, Duluth, GA 30097; 770-467-1224.

**Definition of the Physician Assistant Profession**

Physician Assistants (PAs) are educated and trained to do many of the tasks traditionally performed by physicians. Upon graduation and passing the national PA certification examination, PAs are eligible, in accordance with the regulations of each state's medical licensing board, to function as an extension of a supervising physician. PAs are utilized in all medical care settings as primary care providers in Pediatric, Family and Internal Medicine practices, or assisting specialists in such diverse fields as General Surgery, Surgical sub-specialties, Orthopedics, Obstetrics and Gynecology, Emergency Medicine or Interventional Radiology. PAs currently provide care to millions of Americans in all types of healthcare settings, including offices, clinics, hospitals, nursing homes and long-term care facilities.

**Physician Assistant Program Mission Statement**

The mission of the Physician Assistant Program is to prepare and educate Physician Assistants to provide quality medical care in a competent, compassionate and ethical manner. In addition, the Department promotes research and academic endeavors which contribute to the advancement of knowledge and the education of fellow professionals, as well as community service.

**Physician Assistant Program Vision Statement**

The Physician Assistant Program will prepare and educate Physician Assistants to provide comprehensive quality healthcare to all and to serve as academic and professional leaders of the Physician Assistant profession.

**Admission Information**

- All students must have the following prior to matriculation into the program:

- A Bachelor of Science or Bachelor of Arts degree from an accredited college or university.
- The Graduate Record Education (GRE) examination, taken within 5 years of the time of application.
- Graduates of a foreign educational program need to provide an official evaluation of course equivalence report.
- The Test of English as a Foreign Language (TOEFL) exam is required of any applicant from a country in which English is not the native language and who has not attended college or university in the United States for at least two consecutive years or is not a permanent U.S. resident.

### **Prerequisite Courses**

Each of the following prerequisite courses must be completed at an accredited institution of higher education with a grade of “C” or higher.

- Biochemistry
- Human Anatomy
- Human Physiology
- Introduction to Psychology
- Microbiology (with lab preferred)

The following courses are strongly recommended, but not required: Statistics, Research Design, Technical Writing, Medical Terminology, Medical Ethics and a second, higher-level Psychology course (such as Child Psychology, Developmental Psychology, Abnormal Psychology, etc.)

### **Admissions Process**

- The PA Program is a member of the Centralized Application Service for Physician Assistants (CASPA). All applications must be submitted online directly to CASPA. Prospective applicants should visit the CASPA Web site at [www.caspaonline.org](http://www.caspaonline.org) to apply. The CASPA admissions cycle begins each year on May 1 and ends December 1.
- The Office of Graduate Admissions forwards completed application files for review only after receipt of all application paperwork, which includes receipt of a completed University Supplemental Application and a \$30 processing fee, and the applicant’s GRE scores.
- The PA faculty Admissions Committee reviews each completed application for interview consideration. Applications are evaluated based on the strength of the applicant’s knowledge of the PA profession, personal motivation in becoming a PA, academic performance, research and scholarly activities, length and quality of healthcare experience, leadership and community service activities, and letters of recommendation. Qualified applicants are offered an on-campus interview to assess interpersonal and communication skills, maturity, and commitment to a career as a PA. The interview session also offers the applicant an opportunity to tour the University facilities, meet the faculty and staff, and talk with current students in the Program.
- Upon receipt of an offer of acceptance, the applicant will have a specified time in which to accept or decline the offer. A non-refundable \$500 tuition deposit is required to confirm acceptance and hold the applicant’s place in the class.
- All candidates accepted into the PA program will undergo a criminal record background check upon matriculation into the program. The student is responsible for the cost of the background check, approximately \$25.

### Rolling Admissions

At each interview session, offers of acceptance into the program are extended to selected candidates. Candidate selection at each interview session continues until all seats in the class are filled. After that, applicants may interview for a place on a waiting list. Offers of acceptance are extended to candidates on the waiting list if a candidate from the accepted class list withdraws from the program.

It is to an applicant's advantage to apply as early as possible in the admissions cycle.

### Curriculum Design

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 course work. The second 12 months are comprised of required core clinical rotations in Family Medicine, Internal Medicine, General Surgery, Women's Health, Pediatrics and Emergency Medicine, plus two elective rotations.

Students are also required to develop research competencies throughout the program's two years. Students select one of two research tracks in an area of interest during their first year: a traditional research project with a written Master's Thesis or an Evidence-Based Medicine project, involving a review of the scientific literature to answer a clinical question of interest. Prior to graduation, students present an oral defense of their work to fellow students, faculty and interested clinicians or they participate in a University research poster session.

### Degree Requirements

In order to receive the Master of Science in Physician Assistant Practice, students are required to complete all course work with a grade of "C" or better.

Students must complete all course and curriculum work in its entirety. No advanced standing or transfer credits will be awarded regardless of previous experience.

### REQUIRED COURSES

#### **HPAS 500 PA Professional Issues and Ethics 2 q.h.**

This course is designed to familiarize the student with the history and traditions of the PA Profession. Students will learn about the work of PAs as they function in various healthcare settings. This is complemented by a focused review of current philosophies, policies, and ethical issues in contemporary health care targeted at healthcare professionals.

#### **MCBA 501 Clinical Anatomy 10 q.h.**

This course utilizes formal lecture and cadaver dissection to perform an in-depth study of the structure of the entire human body. This format is supplemented with several lectures specifically designed to correlate the anatomical findings with clinical applications for the medical practitioner.

#### **HPAS 501 General Medicine & Infectious Disease I 10 q.h.**

This is the first in a series of three courses studying principles of patient clinical care. Using an organ-system based approach, lectures discuss the etiology, pathophysiology, diagnosis, and treatment

of various disease syndromes in the areas of dermatology, neurology, endocrinology, and cardiology. The course incorporates principles of diagnostic imaging study interpretation and surgical principles into the discussion of diseases. Infectious disease topics relevant to each system are also discussed.

**HPAS 502 Introduction to EKG 1 q.h.**

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 508 Interviewing and Medical Documentation 2 q.h.**

This course is designed to furnish beginning PA students with the proper techniques for obtaining a medical interview and for documenting the medical record.

Documents to be covered include the complete medical history, admission notes, SOAP notes, progress notes, procedural notes, discharge summaries, hospital orders, etc. Also, accurate and efficient data collection, proper responses to patients' emotions, and skills to educate and influence patients' behaviors are covered.

**HPAS 510 General Medicine & Infectious Disease II 9 q.h.**

This course is the second in the series of Clinical Medicine and Infectious Disease courses as described above. Topic areas are: hematology/oncology, immunology, HIV disorders, renal disease, pulmonology, fluid and electrolyte and acid-base disorders, and gastroenterology.

**HPAS 512 Clinical Decision Making I 2 q.h.**

This course presents students with case studies as a means of teaching how to systematically approach the problem, order appropriate diagnostic studies,

develop a differential diagnosis, write a treatment plan, and describe the prognosis. Whenever possible, this course is integrated with the lecture content of the General Medicine courses.

**HPAS 513 Physical Examination, Lecture/Lab 4 q.h.**

This course teaches the student how to perform a comprehensive head-to-toe physical examination of an adult, as well as how to properly document physical findings in the medical record.

**HPAS 515 Psychosocial Aspects of Patient Care 2 q.h.**

This course aims to pique the awareness of the physician assistant for psychological and sociological aspects potentially operational in the relationship of patient and physician assistant. Students investigate the contextual setting of medical practice, the patient as a person, and the professional physician assistant's psycho/social considerations during patient assessment and treatment.

**HPAS 518 Emergency Medicine 2 q.h.**

This course introduces the PA student to the principles of Emergency Medicine, including the PA's role in triage, assessment, and emergency management. A variety of neonatal, pediatric and adult emergencies will be discussed. In addition, the student will be expected to successfully complete an American Heart Association CPR course (level C) as part of this class.

**HPAS 519 Obstetrics and Gynecology 2 q.h.**

This course is designed to introduce and familiarize the student with the principles of Obstetrics and Gynecology. It will cover a wide variety of common problems, focusing on diagnosis and treatment.

**HPAS 520 General Medicine & Infectious Disease III 7 q.h.**

This course is the third in the series of Clinical Medicine and Infectious Disease courses as

described above. This final quarter focuses on disorders in commonly seen in specialty practice. Topic areas are: breast disorders, genitourinary diseases, rheumatology, otolaryngology, psychiatry, principles of surgery, and ophthalmology.

**HPAS 522 Clinical Decision Making II 2 q.h.**

This is the second of two clinical problem solving courses as described above.

**HPAS 523 Clinical Procedures, Lecture/Lab 3 q.h.**

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 include: phlebotomy, injections (ID, IM, SQ), IV therapy, urethral and nasogastric catheterization, pulmonary function testing, suturing, casting and splinting, various ENT procedures, electrical cardioversion, and use of various types of monitoring devices and restraints. Students will have an opportunity to scrub, gown and glove in an operating room environment, observe endoscopic procedures, and perform phlebotomy on patients at a nearby medical center. In addition, students will be required to successfully complete an Advanced Cardiac Life Support (A.C.L.S.) training course.

**HPAS 525 Geriatrics 2 q.h.**

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.

**HPAS 528 Research and Statistics 2 q.h.**

The purpose of this interprofessional course is to introduce students to research and statistics in medicine. Topics include principles of research, ethics, information retrieval, the literature review and critical examination of articles. Students begin their

work on group research projects and research competencies. In the statistics portion, descriptive and inferential statistics are taught with relevance to research in medicine. Use of computers for statistical analysis is included, and students will have the opportunity to analyze data for their Master's project.

**HPAS 536 Clinical Laboratory for the Health Professional 2 q.h.**

This course applies scientific laboratory methods to diagnostic and therapeutic problems of clinical medicine. The student will receive instruction on how to order lab tests in a timely, appropriate, and cost-effective manner for the purpose of improved patient monitoring and enhanced diagnostic accuracy.

**HPAS 537 Population Medicine 1 q.h.**

This course includes evaluation and discussion of the role of the physician assistant in disease prevention and patient education. Emphasis is placed on the impact of medical intervention in preventable diseases, and the efficacy of screening exams. In addition, students will design and utilize patient education materials in clinical scenarios.

**HPAS 540 Pediatrics 2 q.h.**

This course will introduce the student to the fundamentals of pediatric medicine, covering the age span from neonate through adolescence. Major topic areas to be covered include: care of the neonate, infant feeding, childhood growth and development, preventive care, and diagnosis and management of common pediatric disorders.

**HPAS 551 Leadership in the Health Care Environment 3 q.h.**

This course will enable students to develop an understanding of the complex nature of health care facility problems and learn a systematic approach to problem resolution through the group problem solving process. This is an interdisciplinary course, taught in conjunction with the other programs of the College of Health Professions.

**HPAS 561 Clinical Nutrition for Health Professionals I 1 q.h.**

This course focuses on the area of nutrition for health maintenance and nutritional support for specific clinical situations. Topics addressed include: health promotion and disease prevention; metabolism, requirements, and sources of nutrients; nutritional needs during the life cycle, including pregnancy and lactation, infancy, childhood, adolescence and aging, enteral and parenteral nutrition, critical illness and drug-nutrient interactions.

**HPAS 562 Clinical Nutrition for Health Professionals II 1 q.h.**

This is a continuation of Clinical Nutrition I, but is completed during the second year of the PA program. Real life clinical cases are presented on the Nutrition Web site, and students complete the problems using examples from their clinical year rotation sites.

**HPAS 646 Advanced Physical Examination Lecture/Lab 3 q.h.**

This course expands upon the HPAS 513 Physical Examination course. Students will learn to perform focused physical examinations, as well as specialty exams, that are typically performed by Physician Assistants in clinical practice. Students will also have an opportunity to perform female breast and pelvic examinations, as well as male genital and rectal examinations, on professional instructor patients.

**HPAS 650 Complementary Medicine 1 q.h.**

This course will provide students with a broad perspective of the characteristics and cultural/historical background of complementary health therapies. The student will be given the opportunity to interact with specialists in various fields of complementary medicine.

**PBBS 601 A and B Pharmacology 9 q.h.**

This interprofessional 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.

**HMTD 500 Interprofessional Healthcare Teams 1 q.h.**

This course is an experiential learning opportunity for all students at Rosalind Franklin University of Medicine and Science to learn about a collaborative model of care. The students will interact in healthcare teams focusing on patient-centered care emphasizing evidence-based practice, quality improvement strategies and informatics.

**Clinical Education**

Students will be expected to travel to several clerkships at locations distant from the school. While some sites have housing available, students are otherwise responsible for their own housing.

**HPAS 550 Internal Medicine 6 q.h.**

Six-week clerkship in an Internal Medicine setting

**HPAS 560 General Surgery 6 q.h.**

Six-week clerkship in a General Surgery setting

**HPAS 565 Family Medicine 6 q.h.**

Six-week clerkship in a Family Medicine setting

**HPAS 570 Women's Health 6 q.h.**

Six-week clerkship in an Obstetrics/Gynecology setting

**HPAS 575 Pediatrics 6 q.h.**

Six-week clerkship in a Pediatric setting

**HPAS 680 Emergency Medicine 6 q.h.**

Six-week clerkship in an Emergency Medicine setting

### **HPAS 591 and HPAS 592 Elective Rotations 6 q.h.**

Six weeks each in a medical or surgical subspecialty of the student's choice (subject to approval by the Department). Electives include specialties such as Cardiology, Cardiothoracic Surgery, General Surgery, Neurology, Neurosurgery, Orthopedics, Oncology, Neonatology, Trauma Surgery and Infectious Disease.

### **HPAS 690 Master's Project I 10 q.h.**

The Master's Project course may be completed using one of two available pathways, either by completing a formal research thesis project or by completing an evidence-based medicine project.

For the evidence-based medicine project, the student will be expected to identify an interesting clinical question and then perform a thorough review of the literature to find relevant evidence to support an answer. Critical analysis of the literature and logical decision-making are used to come to a conclusion.

For the research project, students partner with a faculty member to design and carry out a clinical research experiment, and then to analyze the results and present them in a comprehensive paper. Both types of projects are presented to classmates and faculty at the end of the year, either in an oral presentation or at a University research poster session. Complete instructions for the thesis project and evidence-based project are contained in Guidelines published by the PA Department.

### **Adjunct Faculty**

The PA Program has a large number of physicians, PAs and other health professionals who act as adjunct didactic and clinical faculty. The complete list is available in the PA Program Office.

### **Clinical and Education Centers (Affiliations) – Physician Assistant Department**

Advocate Health Care (Park Ridge, IL)  
Advocate Lutheran General Hospital (Park Ridge, IL)  
Advocate Trinity Hospital (Chicago, IL)

Affinity Orthopaedics and Sports Medicine (Appleton, WI)  
Alexian Brothers Medical Center (Elk Grove Village, IL)  
Centegra Health Systems (McHenry, IL)  
Childrens Hospital of Wisconsin (Milwaukee, WI)  
Delnor Community Hospital (Geneva, IL)  
Fox Valley Orthopedic Institute (Geneva, IL)  
Froedtert Memorial Hospital (Milwaukee, WI)  
Glenbrook Hospital (Northshore University Health System - Glenview, IL)  
Great Lakes Naval Hospital (Great Lakes, IL)  
Highland Park Hospital (Northshore University Health System - Highland Park, IL)  
Hines Veterans Administration Hospital (Hines, IL)  
Holy Cross Hospital (Chicago, IL)  
Hurley Medical Center (Flint, MI)  
Illinois Bone & Joint Institute (Glenview, IL)  
John H. Stroger, Jr., Hospital of Cook County (Chicago, IL)  
KSB Center for Health Services (Dixon, IL)  
Marshfield Clinic (Marshfield, WI)  
Mayo Hospital & Clinics (Rochester, MN)  
MD Anderson Cancer Center (Houston, TX)  
Midwestern Regional Medical Center (Zion, IL)  
Mt. Sinai Hospital & Medical Center (Chicago, IL)  
North Chicago Veterans Administration (North Chicago, IL)  
Northwest Community Hospital (Arlington Heights, IL)  
Northwestern Hospital (Chicago, IL)  
Park Nicolett Health Services (St. Louis Park, MN)  
Provena Saint Mary's (Kankakee, IL)  
Resurrection Hospital (Chicago, IL)  
Roseland Hospital (Chicago, IL)  
Sherman Hospital (Elgin, IL)  
Skokie Hospital (Northshore University Health System - Skokie, IL)  
St. Alexius Medical Center (Hoffman Estates, IL)  
St. Bernard Hospital & Healthcare Center (Chicago, IL)  
St. Catherine Hospital (E. Chicago, IN)  
St. Francis Hospital (Evanston, IL)  
St. Mary's Medical Center (Hobart, IN)

The Center for Orthopedic Surgery (Des Plaines, IL)  
Washington Hospital Center (Washington, DC)  
Wheaton Franciscan Healthcare All Saints Hospital  
(Racine, WI)

**Faculty**

Alison Atwater, MS, PA-C, Clinical Instructor  
Alan Auerbach, MD, Clinical Instructor  
Mariclare Barrett, MS, PA-C, Assistant Professor  
Paul Batty, MD, Clinical Assistant Professor  
Craig Baumgartner, MBA, MPAS, PA-C, Clinical  
Assistant Professor  
James Carlson, MS, PA-C, Assistant Professor  
Stephanie Ellis, MPH, RD, LDN, Clinical Instructor  
Wayne Goldstein, MD, Clinical Professor  
Regina Gomez, MD, Clinical Instructor  
Michael Howard, MD, Clinical Assistant Professor  
Matthew Jimenez, MD, Clinical Associate Professor  
P. Rea Katz, MS, PA-C, Assistant Professor  
Walid Khayr, MD, Professor  
Patrick Knott, PhD, PA-C, Associate Professor and  
Chair  
Andrew Kramer, MD, Clinical Assistant Professor  
Stacy Laack, MS, PA-C, Clinical Instructor  
Ajay Madhani, MD, Clinical Assistant Professor  
Elana Min, MMS, PA-C, Assistant Professor  
Ernest Nora, III, MD, Clinical Associate Professor  
Pedro Palu-ay, MD, Clinical Assistant Professor  
Mayra Quintana, MD, Instructor  
Preston Reilly, MD, Clinical Assistant Professor  
Myriam Riboh, MS, PA-C, Clinical Instructor  
Loren Schechter, MD, Clinical Instructor  
Dean Shoener, MD, Clinical Assistant Professor  
Greg Skladzien, MD, Assistant Professor  
James Unti, MD, Clinical Assistant Professor  
Myron Yencha, MD, Clinical Assistant Professor

## DEPARTMENT OF PSYCHOLOGY

The Department of Psychology offers the MS degree in clinical counseling and the Ph.D. degree in clinical psychology. The programs integrate academic, scientific, and professional training. Our program is defined by the scientist-practitioner model. The scientist-practitioner model produces professionals who are uniquely educated and trained to integrate scientific and professional knowledge, attitudes, and skills so as to further psychological science, the professional practice of psychology, and human welfare. The scientist-practitioner model is ideal for professionals who utilize scientific methods in the conduct of professional practice (Belar & Perry, 1992).

### MASTER OF SCIENCE IN PSYCHOLOGY: CLINICAL COUNSELING

The Clinical Counseling training program offers the Master of Science degree through integrated academic, scientific, and professional training. The program provides students with intensive instruction in the theoretical framework of psychology and clinical counseling and broad experience in empirically supported methods of practice in clinical counseling.

The Clinical Counseling core curriculum is constructed as a general degree and the program does not presently offer formal tracks or concentrations. However, through the selection of electives, students can focus a portion of their training on specific areas of interest (e.g., assessment, nutrition, alternative medicine, psychopathology, etc). The overall training emphasis of the program involves both a biological and a behavioral approach to the understanding and treatment of abnormal behavior and its relationship to normal behavior. Our training program is designed to prepare the graduate to enter the field of Clinical Counseling. Students who complete our training program will have the necessary educational credentials to apply for licensure as a Professional Counselor/Clinical Professional Counselor in Illinois. Although licensure requirements vary from state to state, it is anticipated that our program's curriculum will meet the educational criteria for other states that license counselors. Prospective students should confirm the licensing requirements of other states prior to enrolling.

The Clinical Counseling curriculum is designed to prepare the student for clinical service. Students receive training in the identification and treatment of a broad range of mental and nervous 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. The training ensures the development of broad-based clinical skills and encourages close, cooperative work with other healthcare specialists, such as physicians, other mental health professionals and allied health professionals.

### Curriculum Description

The MS in Psychology: Clinical Counseling curriculum is designed to produce graduates who are proficient consumers of the research literature as well as clinicians who employ empirically-based assessment and intervention techniques. Cognitive-Behavioral therapeutic interventions are emphasized in our curriculum. Our curriculum is designed to be completed with two-years of full-time study. Subject to approval granted on a case-by-case basis, the program can be completed in three years of part-time study. The curriculum combines classroom and clinical experiences with service learning opportunities in order to produce well-rounded graduates who are ready to enter the field of Clinical Counseling as a practitioner. Core courses, as required

by licensing authorities to meet the educational requirements for licensure, courses required by the department and electives within and outside of the Department of Psychology comprise the curriculum. All students must also complete a 700 hour Internship/Practicum during their second year of full time studies. Interested students have the opportunity to work in the research laboratories of the Psychology Department faculty in order to gain additional experience in the design and execution of empirical research. This optional experience is often sought out by the student who is interested in applying to Ph.D. programs after completion of their M.S. in Clinical Counseling.

### **Admission Information**

Applications to the Clinical Counseling program are initially received and processed by the CHP Admissions Office. You should receive notification from the Admissions Office once your application has been received informing you of any missing application materials. If you have any questions about the status of your application in terms of its completeness, please feel free to contact the CHP Admissions Office, 847-578-3209; or via e-mail at [grad.admissions@rosalindfranklin.edu](mailto:grad.admissions@rosalindfranklin.edu). When the application is complete (i.e., all required application materials are on file), it is sent to the Psychology Department for review. After review of prospective applicants, the department will invite some applicants for an interview. Each prospective student must complete an interview prior to the extension of any offers of admission.

Our Department recognizes the importance of cultural and individual differences and is receptive to, and supportive of, diversity at a variety of levels in the program including recruitment, curriculum, and the overall climate of learning. We are committed to addressing issues of multiculturalism and enhancing diversity training within the program to meet the needs of our students.

### **Requirements for Admission**

The following are the basic requirements each applicant must fulfill to be considered for admission:

- 1 BA or BS degree from an accredited college or university.
- 2 Three letters of reference from former professors or employers familiar with the applicant's professional or educational capabilities. Preferably, two letters should be from former professors.
- 3 A completed application form with supporting statements and documentation.

The following are the preferred test scores, grades, and academic preparation.

- a) A minimum grade point of 3.0 (on a 4-point scale) during undergraduate studies.
  - b) Adequate undergraduate preparation in the behavioral sciences as demonstrated through major studies in areas such as psychology, sociology, criminal justice, etc.
4. Graduate Record Examination (OPTIONAL) - Verbal, Quantitative, and Analytical Writing and/or Advanced Psychology GRE

It should be noted that each application is reviewed in terms of strengths and compatibility with the program. The final decision is based on the overall profile rather than any particular piece of information. Official notice of acceptance is issued from the Office of the Dean of the College of Health Professions.

Based on an initial review and screening of the application, a designated group of applicants will be invited to visit the Department and meet faculty and students as well as learn more about the program and University.

Interview days will typically be held in March and late April/early May. For those applicants who are unable to attend on this day, arrangements can be made to either visit the University at an alternative time or to have a phone interview with a faculty member. All students to be accepted into the program are expected to either have visited the Department or have a phone-call interview with a member of the faculty.

**Foreign Applicants** - Foreign applicants from a country in which English is not the native language and have not attended an American college or university full-time for 2 consecutive years, must provide an official report of TOEFL (Test of English as a Foreign Language) and TWE (Test of Written English) or The Computer Based TOEFL. Results of the TSE (Test of Spoken English) are also a requirement. These scores must be from examinations taken within the past two years. Test scores must be sent directly from the Educational Testing Service, Princeton, New Jersey 08540. If coursework has been taken abroad, you must provide an official credential evaluation of that coursework by World Education Services (WES). The official WES must be sent directly from the World Education Office to the Office of Admissions. The main telephone number for WES is 212/966-6311, or toll free at 1-800-937-3895, fax number is 212/739-6139 and their web site is <http://info@wes.org>. You must also submit a completed Financial Statement for International Students accompanied by supporting official documentation. If not enclosed, this form can be obtained from the Office of Admissions.

Clinical Counseling Program application deadlines for the academic year starting in August are February 15 (early consideration) and April 1 (routine consideration) of the same calendar year. Applications are accepted after the application deadlines on a space available basis. It is the applicant's responsibility to ensure that all application materials have been postmarked by the deadline date. Inquires about the completeness of an application can be directed to Office of CHP at (847) 578-3209 or email to [grad.admissions@rosalindfranklin.edu](mailto:grad.admissions@rosalindfranklin.edu). Completed applications and other application materials should be sent to:

The CHP Admissions Office  
Rosalind Franklin University of Medicine and Science  
3333 Green Bay Road North Chicago, IL 60064  
(847) 578-3209

## DEPARTMENT OF PSYCHOLOGY

### YEAR 1

Theories of Counseling & Psychotherapy  
Descriptive Psychopathology  
Research Methods for counselors  
Interprofessional Healthcare Teams  
Cognitive & Behavioral Therapy  
Cognitive & Behavioral Therapy - Child & Adolescent  
Diagnostic Interviewing & Report Writing  
Lifespan Developmental Psychology  
Minority Issues in Mental Health  
Personality Assessment

Ethical Issues and Standards for Professional Counselors  
Lifespan Developmental Psychology Minority Issues in Mental Health  
Electives

### YEAR 2

Practicum/Internship and Seminar I  
Practicum/Internship and Seminar II  
Group Dynamics and Counseling  
Social Psychology  
Substance Abuse Assessment and Treatment  
Family Systems and Therapy

## Career Counseling and Development Electives

### **COURSE DESCRIPTIONS**

Content areas, as required by the Illinois Department of Financial and Professional Regulations appear in parentheses after the course title.

#### **HPCC-500 Research Methods for Counselors 4.5 q.h.**

##### **(IDFPR Research and Evaluation)**

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.

#### **HPSC-520 Descriptive Psychopathology 4.5 q.h.**

##### **(IDFPR Psychopathology and Maladaptive Behavior)**

This course presents an in-depth analysis of the DSMIV 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.

#### **HPCC-501 Ethical Issues and Standards for Professional Counselors 4.5 q.h.**

##### **(IDFPR Professional, Legal and Ethical Responsibilities)**

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.

#### **HPSC-575 Social Psychology 4.5 q.h.**

(IDFPR Social and Cultural Foundations) This course presents an in-depth review of the theory and research contributions to social functioning, development, and organizational issues. The impact of culture and social class on the client and counseling relationship will be explored. The utilization of social psychological principles in applied settings will be examined.

#### **HPSC-664 Personality Assessment 4.5 q.h.**

(IDFPR Appraisal of Individuals) 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.

#### **HPSC-690 Cognitive and Behavior Therapy 4.5 q.h.**

(IDFPR Counseling Techniques) 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-695 Theories of Counseling and Psychotherapy 4.5 q.h.**

(IDFPR Counseling Theory) This course will survey the major theories of counseling and psychotherapy from both clinical and research viewpoints. The key concepts and techniques of each theory will be explored. The application of each theoretical orientation in different settings and with diverse populations will be addressed.

**HPSC-754 Life Span Developmental Psychology 4.5 q.h.**

(IDFPR Human Growth and Development) The course is a basic developmental course covering the entire life span 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-783 Family Systems and Therapy 4.5 q.h.**

(IDFPR Family Dynamics) 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-600 Substance Abuse Assessment and Treatment 4.5 q.h.**

(IDFPR Substance Abuse) 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 q.h.**

(IDFPR Group Dynamics, Processing and Counseling) 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 q.h.**

(IDFPR Lifestyle and Career Development) 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 and HPCC-603B Practicum/ Internship and Seminar I and II 5 q.h.**

(IDFPR Practicum/Internship) 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 not be limited to, performing intake assessment, conducting diagnostic interviews, providing psychotherapy or group counseling services, 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 semester 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. (5 q.h. each quarter for 2 successive quarters for a total of 10 units credit)

**HPSC-759 Minority Issues in Mental Health 3 q.h.**

This course will cover the assessment and therapeutic treatment of diverse populations with special emphasis on American ethnic/racial groups. Emphasis will be placed on specific problems associated with age, race, disability, religious preferences, etc., and how these affect the counseling relationship.

**HPCC-502 Diagnostic Interviewing and Report Writing 3 q.h.**

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 q.h.**

(IDFPR Counseling Techniques) 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.

**Electives**

Description of major theories of neuropsychological development, role of brain function in normal and abnormal human behavior, and findings from neuropsychological research in adults and children are discussed in detail.

**HPSC-540 Learning Theory 2 q.h.**

Theoretical overview of various learning theories and models as they apply to human behavior change in clinical intervention. Behavioral, cognitive, social, vicarious learning and conditioning paradigms and their applications to diagnoses and therapy are covered.

**HPSC-560 Tests and Measurement and Cognitive Assessment 4 q.h.**

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 WAIS-R are included.

**HPSC-567 Neuropsychological Assessment 4 q.h.**

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-665 Personality Theory 3 q.h.**

Introduction to personality theory and research. Major personality theories are covered with an emphasis on current approaches, empirical bases and clinical applications. The focus is on normal personality, but the relationship between normal and abnormal personality are discussed.

**HPSC-570 Physiological Psychology 4 q.h.**

Examination of human physiological processes as

these relate to biobehavioral models of normal and abnormal functioning in appetitive, motor cognition and affective systems. Includes introduction to psychopharmacology and also neuroanatomy laboratory.

**HPSC-750 Advanced Physiological Research Seminar -GPSC570 Lab 1 q.h.**

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 Physiological Psychology 1070.

**HPSC-751 Health Psychology and Behavioral Medicine 14 q.h.**

An overview of representative content areas and conceptual approaches to health psychology/behavioral medicine. 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-789 Developmental Psychopathology 4 q.h.**

This course will present an empirically-based developmental psychopathology perspective, with an emphasis on scientific issues and methods. It will explore advanced conceptual models of developmental psychopathology for a range of syndromes, focusing on those that develop in childhood and may continue through the lifespan. With each syndrome, biological, genetic, familial, and social-cultural risk and protective factors will be considered.

**HPSC-765 Clinical Psychopharmacology 1 q.h.**

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. This 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. Electroconvulsive therapy will also be discussed.

**HPSC-788 Forensic Psychology 2 q.h.**

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.

Other electives are possible in other programs within University, in particular within the College of Health Professions. e.g., nutrition, women's issues, healthcare leadership, pharmacology, alternative medicine. When these offerings have been formalized, course descriptions will be posted herein. Extra-departmental electives may have space limitations.

## PHD IN CLINICAL PSYCHOLOGY

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 mode, 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. Students are accepted into the PhD program. During the course of the PhD program, students also earn a Master of Science degree in Psychology (Note: this is separate from the Master of Science in Psychology — Clinical Counseling which is a terminal masters program, see above).

Within the context of a general clinical psychology training program, our program offers focused training in Neuropsychology, Health Psychology and Psychopathology. The training emphasis of the program involves a combined biological and behavioral-approach to the understanding and treatment of abnormal behavior and its relationship to normal behavior. The training tracks prepare students for clinical service, teaching and research in medical, mental health, and academic settings. Students receive training in a broad range of assessment procedures and intervention approaches with an emphasis on empirically supported interventions. Students gain experience with a range of medical, neurological, psychiatric, and neuropsychiatric populations through clinical and research activities. Our graduates are well prepared clinicians and researchers because of their solid grounding in theory, practice, and research. The training assures the development of broad based clinical skills and encourages close cooperative work with other health care specialists such as pediatricians, internists, neurologists, neurosurgeons, geriatricians and psychiatrists.

The clinical psychology program enjoys full accreditation status by the American Psychological Association (APA). Our program strives to maintain a balance between academic course work, research training, and supervised clinical practicums. In designing its core curriculum, the department follows the recommendations of the Committee on Accreditation. The course curriculum includes a sequence of required courses that exposes students to the current body of knowledge in the following areas: biological aspects of behavior, cognitive and affective aspects of behavior, social aspects of behavior, history and systems of psychology, psychological measurement, research methodology, techniques of data analysis and evidence based assessment and intervention for clinical problems. Additionally, students in the areas of Health Psychology, Neuropsychology and Psychopathology are required to take additional courses and electives. A sequence of clinical practicums and participation in research round out the pre-internship years.

For more information about the program, please contact Pat Rigwood at 847-578-3305 or [patricia.rigwood@rosalindfranklin.edu](mailto:patricia.rigwood@rosalindfranklin.edu).

### Program Description

The program requires a minimum of four full-time pre-internship years. In addition, students must complete a one-year internship. While the PhD degree can be completed within five years, typically, six to seven years is the average length of study. Students pay tuition for the first four years.. There are four quarters in the

academic year; all quarters are approximately eleven weeks in duration. The minimum academic load for full-time students is twelve credit hours per quarter. Students are eligible to apply for internship after passage of a Preliminary Qualifying Comprehensive Exam and approval of a dissertation proposal. Once the dissertation proposal is approved, up to three additional years are allowed for the completion of all requirements for the PhD degree (i.e., completion of the dissertation and its defense, and the internship year).

### **Year 1**

A sequence of required courses is taken during the first year. Clinical practicums also begin during the first year. It is anticipated that students will begin active participation in a research program with their advisor. The fourth quarter (Summer) is typically devoted to research and applied courses designed to prepare students for second year practicums.

### **Year 2**

A series of required general courses are offered during the second year. Students may begin to take electives as part of their schedule. Continuation of clinical practicums and research participation occur during this year. Completion of a thesis, along with satisfactory course grades, qualifies the student for the M.S. degree.

### **Year 3 and Year 4**

Track specific courses, electives, required courses, clinical practicums, and research activities continue during these years. Comprehensive exams are taken in January of year 3. Students also complete their masters' thesis and begin work on their dissertation project. The dissertation proposal must be approved by September 30, if the student is to be eligible to apply for internship the following year.

Additional didactic activities in which students may participate include: Department sponsored colloquia; Neuroimaging Seminars; a Visiting Speaker Series and individual case conferences sponsored by the Department of Psychiatry; training conferences, special lectures and grand rounds sponsored by basic science and/or clinical departments, as well as the Psychology and Psychiatry Service of the North Chicago Veterans Affairs Medical Center (NCVAMC).

**TYPICAL SEQUENCE OF REQUIRED COURSES****First Year**

Descriptive Psychopathology	4.5 q.h.
Essentials of Physiology. Psychology & Neuropsychology	6 q.h.
Professional Issues I	1 q.h.
Cognitive Assessment	4 q.h.
Psychological Statistics I	4 q.h.
Psychological Statistics II	4 q.h.
Experimental Design and Program Evaluation I	4 q.h.
Theories of Personality, Psychotherapy & Counseling	6 q.h.
Professional Seminar In Clinical Fundamentals ( taken during Summer after year 1)	2 q.h.
Interprofessional Teams	1 q.h.
Culture in Healthcare	1 q.h.
Clinical Practicum Clinical practicum Supervision	3 q.h.
Research Practicum (Masters)	

**Second Year**

Neuropsychological Assessment	4 q.h.
Theoretical Psychopathology	3 q.h.
Cognitive & Behavioral Interventions	5 q.h.
Personality Assessment 4 q.h. Health Psychology: Cognitive, Affective & Physiological Bases for Behavior	4 q.h.
Social Psychology	4.5 q.h.
Clinical Practicum Clinical Practicum Supervision	3 q.h.
Research Practicum (Masters)	

**Third Year**

History & Systems	2 q.h.
LifeSpan Developmental	4.5 q.h.
Professional Issues II	3 q.h.
Minority Issues in Mental Health	3 q.h.
Clinical Practicum Clinical Practicum Supervision	3 q.h.
Research Practicum (Dissertation)	
Electives	

**Fourth Year**

Clinical Practicum  
Clinical practicum Supervision  
Research Practicum (Dissertation)  
Electives

**Fifth Year**

Internship

## Clinical Practicums

Clinical training is considered an integral part of the doctoral program in clinical psychology. Clinical practicums are organized to ensure a progression of clinical training experiences that correspond with the sequence of the course curriculum. Clinical practicum training plays an important role in the integration of theory, research and practice. Clinical practice provides opportunities for students to integrate critical thinking and hypotheses testing into their clinical activities and to assimilate an empirical, scientifically informed approach to clinical practice. The department works collaboratively with a number of off-site practicum training sites in the Illinois and Wisconsin areas. These settings include, but are not limited to, hospitals, medical centers, community mental health centers, school districts, and private practices. Students gain experience in general therapy and assessment skills, as well as training specifically in the training tracks offered in the department, neuropsychology, health psychology and psychopathology. Although the department primarily has a cognitive-behavioral orientation, the practicum training at the different sites expose students to multiple theoretical orientations and intervention techniques.

Beginning in the first year, each student begins a series of practicum experiences that will total a minimum of 1,000 hours (34 credit hours). Typically, students have an average of 2,000 hours of clinical training by the time they apply for internships. Ideally, a student obtains a breadth of clinical experiences including diagnostic interviewing skills, assessment and intervention skills. Clinical practicums in year 1 and year 2 are designed to provide students with clinical training in fundamental intervention and assessment skills. Training in the first two years is expected to prepare students for more advanced clinical training in years 3, 4, and 5 in track-specific areas.

First-year students are typically assigned to a practicum placement. The objective of first-year practicum training is to introduce students to a setting that provides clinical services, so that a student is able to understand the roles and functions of clinical psychologists. First-year students are typically expected to spend 4 to 6 hours per week in clinical practicum training. This year first year students are completing clinical practicums at the following sites: DuPage County Psychological Services, 18<sup>th</sup> Judicial Circuit Court (Treatment of Male Perpetrators of Partner Violence); Head Start of Lake County; Healthy Families Program; North Chicago VA; and Vista Medical Center.

From the beginning of the second year until the approval of the Master's Thesis proposal, students spend an average of nine hours per week in clinical practicum training. The second-year practicum consists of clinical service in a community-based setting coupled with a yearlong didactic course. Students first meet with the Director of Clinical Training (DCT) and their respective advisor to discuss training and career goals in order to determine the appropriate placement for the second year practicum. Placements include psychological assessments for schools and adult centers as well as psychotherapy at the VA. Primary supervision will be provided on-site; however, a secondary supervisor will be assigned from the faculty to assist if necessary. To balance training, all students will have the opportunity to do both assessment and psychotherapy in their second year.

After approval of the Master's Thesis proposal, students may spend a maximum of 12 hours per week in practicum training. Students at this level typically choose practicum placements that are more intensive and

closely match their area of interest (e.g., health psychology, neuropsychology, and psychopathology). A listing of the different practicum sites is available on the department's Web site at [www.rosalindfranklin.edu/chp/CHP/Psychology/tabid/1456/Default.aspx](http://www.rosalindfranklin.edu/chp/CHP/Psychology/tabid/1456/Default.aspx). The DCT works closely with students to facilitate specific placements. The DCT also works with the different sites to ensure that practicum experiences are supervised and structured to meet the training needs of students.

### **Tracking Practicum Hours**

Students applying for internship are required to report details about their practicum hours. Students are encouraged to maintain an ongoing record of practicum hours and other details regarding their practicum experiences. This increases the accuracy of reporting at the time of internship application and also assists in the practicum selection process. There are several sources whereby a student can access sample forms. A program that students have found to be particularly helpful in tracking their clinical training hours is [www.time2track.com](http://www.time2track.com). There is an annual subscription cost of about \$32. The Director of Clinical Training is available to answer any questions regarding tracking of practicum experiences.

### **Research**

Student research is a fundamental part of the training program. Students begin participating in faculty research early in the first year, and quickly become integral members of a research team. The faculty has broad research interests within the areas of neuropsychology, health psychology, and psychopathology (see faculty research interests). Under faculty supervision, students complete a master's thesis, and ultimately develop their own research culminating in the doctoral dissertation.

### **Advisors**

Upon entering the program, students are assigned a faculty advisor that matches their clinical-research interests. This faculty member serves as both the academic advisor and research mentor. Advisors guide students through the selection of courses, independent study and practicum experiences necessary to complete the program. They provide information, direction, feedback and long-term guidance. Advisors meet with students regularly to review academic performance and to discuss future plans. In addition, an annual meeting of student-advisor-DCT is held to review a student's progress and recommendations made for further training

In addition to faculty advisors, all incoming students are also matched to student mentors who also assist students in their transition to graduate school and adjustment to the program.

### **Internships**

Students are required to complete a one-year, full-time, clinical internship, after having completed formal course work and a dissertation proposal. The internship is completed at a site chosen to meet student's individual career goals. During internship, students function under supervision as clinical psychologists. The internship facility must comply with the American Psychological Association accreditation standards and must be approved by the Department of Psychology. Our students are typically accepted into APA-approved, high quality internship programs all across the country.

### Requirements for PhD Degree

1. Successful completion of all required courses in the program curriculum and an approved group of elective courses.
  - a. It is expected that core courses will be completed through departmental offerings. Electives are typically taken in the department or in related programs within the University. In some instances, electives may be fulfilled through courses taken in another institution. A course syllabus must accompany your request for approval and an official transcript must be provided so that credit can be received. All of this must be approved by the advisor and the faculty.
  - b. Students who have formally registered for and successfully completed one or more graduate courses in accredited universities, prior to entry into our program, may transfer up to 12 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. All students must enroll at Rosalind Franklin University of Medicine and Science for all required courses and specified electives for their chosen area of clinical emphasis.
2. A minimum of 1,000 clinical practicum pre-internship hours.
3. Completion of a Master's Thesis research project.
4. Passing the comprehensive examinations.
5. Completion of a dissertation proposal and satisfactory oral defense of the dissertation.
6. Demonstrated proficiency in the internship year.
7. Good academic standing defined by an overall average of B or better.

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

### Requirements for Admission

The following are the basic requirements each applicant must fulfill to be considered for admission:

1. BA or BS degree from an accredited college or university.
2. Three letters of reference from former professors or employers familiar with the applicant's professional or educational capabilities. Preferably, two letters should be from former professors.
3. Graduate Record Examination – Verbal, Quantitative, and Analytical Writing. The Advanced Psychology GRE is required for those students who are not undergraduate Psychology majors or have a master's degree in a non-psychology discipline.

The following are the **preferred** test scores, grades, and academic preparation.

- A minimum grade point of 3.2 (on a 4-point scale) for the last two years of undergraduate study.
- Adequate preparation in psychology: at least 15 credit hours of psychology, including a course in statistics and biological psychology.
- A score of 600 in each area of the GRE: Verbal, Quantitative, Analytical and Advanced Psychology. For the Analytical Writing, at least 4.5/5 minimum.

## Foreign Applicants

Foreign applicants from a country in which English is not the native language and have not attended an American college or university full-time for 2 consecutive years must provide an official report of TOEFL (Test of English as a Foreign Language) and TWE (Test of Written English) or the computer-based TOEFL. Results of the TSE (Test of Spoken English) are also a requirement. These scores must be from examinations taken within the past two years. Test scores must be sent directly from the Educational Testing Service, Princeton, New Jersey, 08540. If coursework has been taken abroad, an official credential evaluation of that coursework by World Education Services (WES) must be provided. The official WES must be sent directly from the World Education Office to the Office of Admissions. The main telephone number for WES is 212-966-6311, or toll-free at 800-937-3895; fax number is 212-739-6139, and the Web site is [www.wes.org](http://www.wes.org).

A completed Financial Statement for International Students accompanied by supporting official documentation must also be submitted. If not enclosed, this form can be obtained from the Office of Admissions.

It should be noted that each application is reviewed in terms of strengths and compatibility with the program. The final decision is based on the overall profile rather than any particular piece of information. Official notice of acceptance is issued from the Office of the Dean of the College of Health Professions.

Applications to the Clinical Psychology program are initially received and processed by the CHP Admissions Office.

When the application is complete it is then forwarded to the Psychology Department for further consideration. You should receive notification from the Admissions Office once your application has been received informing you of any missing application materials. If you have any questions about the status of your application in terms of its completeness, please feel free to contact the CHP Admissions Office at 847-578-3209 or [grad.admissions@rosalindfranklin.edu](mailto:grad.admissions@rosalindfranklin.edu). After review of prospective applicants, the department will invite some applicants for an interview. The interview day usually takes place on the first Friday in March.

For those applicants who are unable to attend on this day, arrangements can be made to either visit the University at an alternative time or to have a phone interview with a faculty member. These arrangements should be coordinated through the Department of Psychology's Administrative Assistant, Ms. Pat Rigwood, at 847-578-3305. All students to be accepted into the program are required to either visit the department or have a phone interview with a member of the faculty.

### **Application deadline for the academic year starting in August is December 1.**

It is the applicant's responsibility to ensure that all application materials have been received by the deadline date. Inquires about the completeness of an application can be directed to Office of CHP Admissions at 847-578-3209 or [grad.admissions@rosalindfranklin.edu](mailto:grad.admissions@rosalindfranklin.edu). Completed applications and other application materials should be sent to:

CHP Admissions Office  
Rosalind Franklin University of Medicine and Science  
3333 Green Bay Road North Chicago, IL 60064

Our department recognizes the importance of cultural and individual differences and is receptive to, and supportive of diversity at a variety of levels in the program including recruitment, curriculum, and the overall climate of learning. We are committed to addressing issues of multiculturalism and enhancing diversity training within the program to meet the needs of our students.

## COURSE DESCRIPTIONS

### CORE COURSES

#### **HPSC 510 Psychological Statistics I 4 q.h.**

Introduction to the methods of modern statistical analysis and their 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 q.h.**

Correlational techniques, partial correlation, regression analysis, analysis of variance, simple and complex experimental design, analysis of covariance, multivariate analysis.

#### **HPSC 515 Experimental Design and Program Evaluation 4 q.h.**

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 q.h.**

In depth analysis of diagnostic criteria for major categories of psychopathology which covers the

concept of illness, schizophrenia, affective disorders, anxiety disorders, organic brain disease and personality disorders. This course also introduces neurological evaluations.

#### **HPSC 521 Theoretical Psychopathology 3 q.h.**

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 541 History and Philosophy of Science 2 q.h.**

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 Tests and Measurement and Cognitive Assessment 4 q.h.**

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 WAIS-R are included.

#### **HPSC 567 Neuropsychological Assessment 4 q.h.**

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 572 Essentials of Physiology, Psychology and Neuro Psychology 6 q.h.**

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.

**HPSC 571 Independent Study 1-3 q.h.**

Independent study course which would involve students to typically work one on one with 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 575 Social Psychology 4.5 q.h.**

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 664 Personality Assessment 4 q.h.**

Theory and application of objective psychological tests for the assessment of personality and personality development.

**HPSC 666 Theories of Personality, Psychotherapy, and Counseling 6 q.h.**

Introduction to the major theories of personality and the major systems of Psychotherapy and counseling. Current research on the impact of personality traits on behavior and relationships between normal and abnormal personality traits are reviewed. The implications of psychotherapy systems for case formulation and the similarities and differences between different psychotherapy systems are reviewed. Research bearing on and based on these systems is considered

**HPSC 690 Cognitive and Behavioral Intervention 5 q.h.**

Current application of learning principles and techniques of therapeutic change and problems encountered in practical applications. Emphasis is on methods and procedures effective in the elimination of inappropriate behaviors and the acquisition and maintenance of appropriate behaviors.

**HPSC 751 Health Psychology: Cognitive, Affective, and Physiological Bases for Behavior I 4 q.h.**

An overview of representative content areas and conceptual approaches to behavior genetics with reference to temperament and psychopathology; basic emotion theories and neural substrates of emotion regulation; psychophysiology of stress; impact of social support, appraisal and coping on incidence of cardiovascular disease, cancer, and obesity; concepts of pain from nervous system, immune and endocrine perspectives

**HPSC 754 Life Span Developmental 4.5 q.h.**

The course is a basic developmental course covering the entire life span from biological, social, and cognitive perspectives. Special emphasis will be placed on the unique methodological features of developmental research. The course will complement training in all three aspects of the program, namely clinical, health, and neuropsychology.

**HPSC 755 Ethical Issues and Professional Standards in Clinical Psychology I 1 q.h.**

The course is designed to introduce the doctoral student to professional training in clinical psychology. A broad range of topics are reviewed including professional training, specialization within clinical psychology, professional ethics, and career development. Emphasis is placed on the student's development of a comprehensive understanding of ethical principles and issues affecting the practice of contemporary clinical psychology.

**HPSC 756 Ethical Issues and Professional Standards in Clinical Psychology II 3 q.h.**

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 759 Minority Issues in Mental Health 3 q.h.**

Assessment and therapeutic treatment of diverse populations with special emphasis on American ethnic/racial groups. Emphasis on specific problems associated with age, race, disability, religious preferences, etc., and how these affect the counseling relationship.

**HPSC 784 Professional Seminar in Clinical Fundamentals 2 q.h. each**

Students will be cross-trained in assessment and therapy skills regardless of their specific practicum placements. Initial sessions will include microskills and clinical interviewing training. Later sessions will include review of psychological tests to be used at respective practicum sites and didactics on topics such as multidisciplinary committee meetings, individual education plans, specific therapeutic interventions and special populations. During the academic year, hour-long meetings will be held twice a month and will essentially serve as support to the individual supervision received at respective sites. The meetings will primarily focus on case conceptualization skills and remediating skills necessary for particular practicum sites.

**HPSC 789 Developmental Psychopathology 4 q.h.**

This course will present an empirically-based developmental psychopathology perspective, with an emphasis on scientific issues and methods. It will explore advanced conceptual models of developmental psychopathology for a range of syndromes, focusing on those that develop in childhood and may continue through the lifespan.

With each syndrome, biological, genetic, familial, and social-cultural risk and protective factors will be considered.

**HPSC 800 Clinical Practicum (q.h. to be arranged)**

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 850 Research Practicum (q.h. to be arranged)**

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 encompass the entire year.

**HPSC Clinical Practicum Supervision 1 q.h.**

Students from each of the first four years in the doctoral program in the psychology department at Rosalind Franklin University will meet twice a month with their same year peers and the Director of Clinical Training. Meetings will be held twice a month for two hour periods. During these meetings students will discuss their clinical practicum experiences and share their experiences via group case presentations. Particular attention will be paid to helping students develop conceptualization, case formulation and treatment skills. Students will develop a greater breadth of knowledge through vicarious experiences since they will be exposed to different types of cases that they would not customarily be exposed to. Students will also be able to present any issues they need clarification with or any difficulties they are experiencing in their clinical practicums. Students will receive help with any difficulties they are encountering in their practicum placement.

## Elective Courses

### **HPSC 571 Independent Study 1-3 q.h.**

Independent study course which would involve students to typically work one on one with 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 632 Child Neuropsychology 2 q.h.**

Goal of this course is to provide an introduction to the issues and principles involved in the neuropsychological evaluation of children. A basic theme will be an examination of the unique considerations involved in the assessment/interpretation of test data from a developmental neuropsychological perspective.

### **HPSC 700 Psychology of Aging 3 q.h.**

Effect of aging on emotions, intellectual functions, sensation and social interaction and life-style. Topics are discussed from a theoretical and clinical view point.

### **HPSC 704 Family, Parent and Child Therapy 2 q.h.**

Behavioral approaches to intervention in behavioral difficulties within the family. The treatment of children is discussed primarily from a practical viewpoint. The efficacy of various therapeutic regimes is evaluated.

### **HPSC 744 Child Psychopathology 2 q.h.**

This course emphasizes the developmental aspect of abnormal personality processes in children and adolescence. Specific disorders of behavior and affect in the pre-adult years will be examined. (2 units)

### **HPSC 753 Group and Social Systems Psychotherapy: Theory, Research and Application 2 q.h.**

Course dynamic theory and research on groups and

social systems focusing on small and large group dynamics and intergroup relations will be examined in the first three sessions of the course. The work of Bion, Cytrynbaum, Edelson, Fried, Horowitz, Lipgar, Mann, Rice, and Wheelan will be presented in a lecture-discussion format. During the first four sessions, one hour of class will consist of continuing lecture discussion based upon student reading summaries and research-observational reports from students. The second hour will be used for an experiential small group in which the focus will be on group-as-a-whole dynamics. The latter four sessions of the course will emphasize the application of group and systems theory and research and experiential learning to topics including therapeutic groups, milieu therapy, work and problem solving groups, educational groups, organizational leadership and change, and consultation to human delivery systems.

### **HPSC 757 Seminar in Psychoanalytic Therapy 2 q.h.**

Since its inception, a number of changes have occurred in psychoanalysis in both theory and technique and the pace of change keeps increasing. Starting with Freud, we will survey and apply the ideas of a number of "post-Freudian" analysts to our current clinical work.

### **HPSC 758 Managing Care and Risk in Psychological Practice 2 q.h.**

Managed care's impact on the practice of psychology has caused a great deal of conflict and change. Many psychologists are not adequately prepared to deal with this impact on their practices. This course will provide: 1) an understanding of healthcare financing and managed care's evolution; 2) an understanding of the various types of managed care and third-party payors; 3) methods in which to structure one's practice, agency, or facility as to best operate within managed care; 4) methods of mitigating risk; 5) examples of legal issues and precedents; and 6) strategies for the future.

**HPSC 765 Clinical Psychopharmacology 1 q.h.**

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. This 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. Electroconvulsive therapy will also be discussed. Readings will be assigned.

**HPSC 770 Pediatric Psychology Seminar 2 q.h.**

The Pediatric Psychology Seminar is an upper level course designed to help students apply their clinical skills to a pediatric setting. The course has an extensive reading list that includes both book chapters and articles from peer-reviewed journals. The first half of the course focuses on general issues in pediatric psychology that are relevant to clinicians, regardless of the child's specific medical diagnosis. Among the topics covered in this section are: developmental issues, family issues, cultural and ethnic issues, adaptation and coping to illness, and adherence to medical regimens. The second half of the course focuses on specific medical diagnoses and addresses the specific emotional and behavioral issues associated with that disease. Among the diagnoses discussed are asthma, diabetes, HIV, cystic fibrosis, and solid organ transplant.

**HPSC 771 Cardiac Psychology Graduate Seminar 1 q.h.**

This course will offer an overview of psychological issues and theories of history relevant to heart disease. It will give background information on heart disease, clinical issues and research, risk factors managements and research, and other issues of heart disease.

**HPSC 773 Topics in Medical Neuropsychology 2 q.h.**

Neuropsychology has traditionally focused attention on diseases of the central nervous system with little consideration to diseases of other organs and systems that could compromise cerebral integrity and disrupt cognition and behavior. Each organ system contributes in unique and specialized fashion to maintaining the integrity of brain functioning. This elective will address the consequences of disturbed functioning of organs and organ systems such as the pulmonary system, cardiovascular system, renal system, hepatic system, pancreas, and thyroid. Discussion will also focus on the various factors that can influence the cognitive performance of medically ill patients (such as stage of illness, age of disease onset, treatment effects) and the impact cognitive/behavioral deficits can have on the patient's independent functioning/quality of life and on their medical management. In addition to lecture and readings, students will be responsible for a short paper and a class presentation based on this paper. A take-home exam final is anticipated.

**HPSC 774 Introduction to Pediatric Psychiatry 2 q.h.**

The first part of the course focuses on child development. Direct observation of children is provided by visits to schools, child-centered agencies in the community, videotapes and films. The second part of the course introduces diagnostic procedures. Videotapes of diagnostic interviews with children, adolescents, and parents are combined with lectures reviewing the common syndromes in child psychiatry. Readings focus on diagnosis and treatment, including play therapy.

**MNSC 501 Medical Neuroscience 8 q.h.**

A multidisciplinary approach to the structure and function of the nervous system is presented by faculty from the Departments of Biological Chemistry and Structure, Cell Biology and Anatomy, Neurology, Pharmacology and Molecular Biology and Physiology

and Biophysics. This course provides a broad introduction to modern neurobiology by lecture, laboratory demonstration and conference sessions. The goal of the course is to correlate the structure with the function of the nervous system in man and other animals under normal, as well as drug- or disease-modified conditions.

**HPSC 781 Effective Behavioral Risk Interventions 1 q.h.**

This class will review several programs in smoking cessation, weight loss, exercise, dietary change, and medication/treatment adherence, but the main focus will be on the psychological, social and environmental factors and processes involved in creating sustainable, long-term change in these areas to reduce health risks.

**HPSC 782 Neuropsychology of Emotion 2 q.h.**

This class will provide an overview of the neuroanatomy, neurophysiology, and neuropsychology of emotion, as well as major biologic theories/models of emotional processing. Additionally, several classes of psychiatric illnesses (including affective disorders, anxiety disorders, and schizophrenia) will be explored from the standpoint of biologic etiology, and their respective presentations will be examined in terms of underlying cognitive and emotional deficits.

**HPSC 783 Family Systems and Therapy 3 q.h.**

In this course students are introduced to major models of family therapy. Primary theorists and techniques of each model will be considered. Lectures, class discussion and small group interactions are included. Students will gain a working knowledge of some of the major family systems models; they will also explore and understand the theories and techniques applicable to each model; explore a variety of family systems with an emphasis on understanding cultural, gender, and sexual orientation differences as they relate to family therapy; understand and complete assessment

procedures with particular emphasis on genogram construction and interpretations and finally examine ethical issues as they relate to the practice of family therapy.

**HPSC 785 Professional Issues Seminar 2 q.h.**

This 2-credit elective is open to all students. Department of Psychology alumni will lead most of the seminars. A variety of topics will be discussed: Professionalism in the Medical Setting; Level of Care/Emergency Room Assessments; Substance Abuse Evaluations; Working with the Developmentally Handicapped & the DCFS System; Working with the School System to advocate for special education services; Alternative Career Paths; Developing a Fee for Service Clinic/Practice; Integrating Research into one's Clinical Practice; and Organizing and Managing Clinical Drug Trials. Speakers may have handouts/articles for your reference.

**HPSC 786 Clinical Medicine for Psychologists 2 q.h.**

This is a didactic course covering the major medical disorders and their behavioral/cognitive implications. The major illnesses within the following disciplines will be discussed: endocrine disorders, cardiology, gastroenterology, infectious disease, hematology/oncology, nephrology, neurology, pulmonary medicine and rheumatology. The epidemiology diagnosis, differential diagnosis, clinical manifestations, basic pathophysiology, laboratory findings, course of illness, and treatment will be covered in detail from a medical perspective. Readings will be assigned. Prerequisite: Graduate-level physiological psychology.

**HPSC 788 Forensic Psychology 2 q.h.**

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) and hybrid criminal/civil

matters (e.g., sex offender commitment), ethical guidelines and professional issues.

**HPSC Family Violence Elective. 2 q.h.**

The different types of violence that can be experienced within the family will be explored separately in this course. More specifically, the different types of child abuse: physical, sexual, emotional and neglect, as well as violence between intimate partners and elder abuse will be thoroughly studied. Current empirical findings relating to the nature of the problem, demographics, incidence, etiology, different theoretical approaches, assessment and treatment will be presented. There will be particular emphasis on the presentation of assessment and treatment approaches. A multicultural understanding of the problem will be encouraged. Current controversies in each of these areas will also be presented and discussed. The emphasis will be on presenting current empirically derived knowledge in the field and encouraging students to think critically about the many issues raised by this highly sensitive area. This course is open to all students from the different departments at Rosalind Franklin University and it is hoped that students from different departments will participate to address the multidisciplinary nature and focus of this field. The effects of Family Violence can be felt across all sectors of society and professionals from different disciplines will at some point in their career encounter this problem and will need to intervene at some level. The class will meet once a week for three hours. Grading will be based on class participation, a written exam and a paper to be presented at the end of the course.

**Faculty**

John E. Calamari, PhD, Chairman and Professor  
 Arthur Cantos, Ph.D., Associate Professor and  
 Director of Clinical Training  
 Rachel Greenley, Ph.D., Assistant Professor  
 David S. Kosson, PhD, Associate Professor  
 Kenneth H. Kessler, PhD, Associate Professor and  
 Director, Clinical Counseling Program  
 Lawrence C. Perlmutter, PhD, Professor  
 Michael Seidenberg, PhD, Professor  
 Helen W. Wilson, PhD, Assistant Professor