

2010-2011  
CATALOG



PHILADELPHIA  
COLLEGE OF  
OSTEOPATHIC  
MEDICINE

## **PHILADELPHIA CAMPUS**

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Office of the Senior Vice President for Academic Affairs  
215-871-6770 • FAX 215-871-6781  
Office of Admissions  
800-999-6998 • 215-871-6700 • FAX 215-871-6719

## **GEORGIA CAMPUS**

625 Old Peachtree Road NW • Suwanee, GA 30024  
Office of the Dean  
678-225-7504 • FAX 678-225-7509  
Office of Admissions  
866-282-4544 • 678-225-7531 • FAX 678-225-7509

The information contained within reflects the status of the College as of August 2010. PCOM reserves the right to delete any course described in this catalog. The College also reserves the right to effect any other changes in the curriculum, tuition/fees, administration, or any other phase of school activity without notice. The educational objectives and cultural competencies of the campuses are identical. This catalog appears online at [www.pcom.edu](http://www.pcom.edu). The College also publishes student handbooks containing more detailed information about its policies, procedures and organizations.

**PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE**  
**2010-2011 CATALOG**

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# PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

## 2010-2014 CALENDAR

### SUMMER 2010

May 24	Monday	Summer Term Begins
May 31	Monday	Memorial Day (No Classes & Administrative Offices Closed)
June 5	Saturday	Philadelphia DO Commencement
July 5	Monday	Independence Day Holiday (No Classes & Administrative Offices Closed)
July 31	Saturday	Philadelphia Graduate Program Commencement
August 13	Friday	Summer Term Ends

### FALL 2010

August 16	Monday	Fall Term Begins
September 6	Monday	Labor Day (No Classes & Administrative Offices Closed)
November 12	Friday	Fall Term Ends

### WINTER 2010-2011

November 15	Monday	Winter Term Begins
November 25-26	Thursday-Friday	Thanksgiving Holiday (No Classes & Administrative Offices Closed)
December 24	Friday	Christmas Holiday (No Classes & Administrative Offices Closed)
December 31	Friday	New Year's Holiday (No Classes & Administrative Offices Closed)
January 17	Monday	Martin Luther King Holiday (No Classes & Administrative Offices Closed)
February 18	Friday	Winter Term Ends

### SPRING 2011

February 21	Monday	Spring Term Begins
May 20	Friday	Spring Term Ends

### SUMMER 2011

May 22	Sunday	Georgia DO and Graduate Program Commencement
May 23	Monday	Summer Term Begins
May 30	Monday	Memorial Day (No Classes & Administrative Offices Closed)
June 5	Sunday	Philadelphia DO Commencement
July 4	Monday	Independence Day (No Classes & Administrative Offices Closed)
July 29	Friday	Philadelphia Graduate Program Commencement
August 12	Friday	Summer Term Ends

### FALL 2011

August 15	Monday	Fall Term Begins
November 11	Friday	Fall Term Ends

### WINTER 2011-2012

November 14	Monday	Winter Term Begins
November 24-25	Thursday-Friday	Thanksgiving Holiday (No Classes & Administrative Offices Closed)
December 25-26	Sunday-Monday	Christmas Holiday (No Classes & Administrative Offices Closed)
January 16	Monday	Martin Luther King Holiday (No Classes & Administrative Offices Closed)
February 17	Friday	Winter Term Ends

### SPRING 2012

February 20	Monday	Spring Term Begins
May 18	Friday	Spring Term Ends

### SUMMER 2012

May 21	Monday	Summer Term Begins
May TBA		Georgia DO and Graduate Program Commencement
May 28	Monday	Memorial Day (No Classes & Administrative Offices Closed)
June TBA		Philadelphia DO Commencement
July 4	Wednesday	Independence Day (No Classes & Administrative Offices Closed)
July TBA		Philadelphia Graduate Program Commencement
August 17	Friday	Summer Term Ends

# PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

## 2010-2014 CALENDAR

### FALL 2012

August 20	Monday	Fall Term Begins
September 3	Monday	Labor Day (No Classes & Administrative Offices Closed)
November 16	Friday	Fall Term Ends

### WINTER 2012-2013

November 19	Monday	Winter Term Begins
November 22-23	Thursday-Friday	Thanksgiving Holiday (No Classes & Administrative Offices Closed)
December 25	Tuesday	Christmas Day (No Classes & Administrative Offices Closed)
January 1	Tuesday	New Year's Day (No Classes & Administrative Offices Closed)
January 21	Monday	Martin Luther King Holiday (No Classes & Administrative Offices Closed)
February 28	Friday	Winter Term Ends

### SPRING 2013

March 4	Monday	Spring Term Begins
May 27	Monday	Memorial Day (No Classes & Administrative Offices Closed)
May TBA		Georgia DO and Graduate Program Commencement
May 31	Friday	Spring Term Ends

### SUMMER 2013

June 3	Monday	Summer Term Begins
June TBA		Philadelphia DO Commencement
July 4	Thursday	Independence Day Holiday (No Classes & Administrative Offices Closed)
July TBA		Philadelphia Graduate Program Commencement
August 16	Friday	Summer Term Ends

### FALL 2013

August 19	Monday	Fall Term Begins
September 2	Monday	Labor Day (No Classes & Administrative Offices Closed)
November 15	Friday	Fall Term Ends

### WINTER 2013-2014

November 18	Monday	Winter Term Begins
November 28-29	Thursday-Friday	Thanksgiving Holiday (No Classes & Administrative Offices Closed)
December 25	Wednesday	Christmas Day (No Classes & Administrative Offices Closed)
January 1	Wednesday	New Year's Day (No Classes & Administrative Offices Closed)
January 20	Monday	Martin Luther King Holiday (No Classes & Administrative Offices Closed)
February 28	Friday	Winter Term Ends

### SPRING 2014

March 3	Monday	Spring Term Begins
May 26	Monday	Memorial Day (No Classes & Administrative Offices Closed)
May TBA		Georgia DO, Pharmacy, and Graduate Program Commencement
May 31	Friday	Spring Term Ends

### SUMMER 2014

June 2	Monday	Summer Term Begins
June TBA		Philadelphia DO Commencement
July 4	Friday	Independence Day Holiday (No Classes & Administrative Offices Closed)
July TBA		Philadelphia Graduate Program Commencement
August 15	Friday	Summer Term Ends

### FALL 2014

August 18	Monday	Fall Term Begins
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# PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

## MISSION

Philadelphia College of Osteopathic Medicine (PCOM) is dedicated to the education of students in medicine, health and behavioral sciences. The College fosters the growth of the osteopathic profession by training physicians through programs of study guided by osteopathic medical tradition, concept and practice. PCOM is committed to the advancement of knowledge and intellectual growth through teaching and research, and to the well-being of the community through leadership and service.

## EDUCATIONAL GOALS

The College's educational goals focus on presenting high-quality, comprehensive programs of study that embrace the following expectations of student learning:

- Students will demonstrate a central core of biomedical or behavioral science knowledge in their field of study, including theory, foundations, clinical skills and applied clinical/practical application as appropriate to the specific academic program.
- Students will demonstrate communication skills through clinical assessments, group discussion and/or written or oral presentation in their respective fields.
- Students will demonstrate an understanding of scientific inquiry by designing, conducting, presenting or interpreting research in their field of study and appropriate to their academic program.
- Students will identify, retrieve, understand, analyze, synthesize and apply information collected from various sources and in varied formats, including those requiring skills in the use of information technology.

## GEORGIA BRANCH CAMPUS FOCUS

The primary focus of Georgia Campus – PCOM is to recruit and educate students from Georgia and the surrounding states. The Georgia Campus seeks to retain graduate osteopathic physicians, pharmacists, biomedical scientists and other health care professionals in the Southeast, to serve the health needs of the region and advance the osteopathic profession and pharmacy.

## THE COLLEGE

When osteopathic schools were forming throughout the country in the 1890s, two students at the Northern Institute of Osteopathy in Minneapolis, Mason W. Pressly and Oscar John Snyder, targeted Philadelphia as a future home for an

osteopathic medical college. Although the City of Brotherly Love had a rich history of medicine, it had but one “osteopathist” by the time Pressly and Snyder graduated in 1898 and 1899, respectively. PCOM’s founders were outspoken, pioneering physicians who explored and taught the use of manipulative therapy in the prevention of disease long before the use of penicillin and modern drugs. The two young osteopathic physicians followed through with their vision, incorporating the Philadelphia College and Infirmary of Osteopathy on January 24, 1899. The first PCIO degree was awarded to a transfer student; the first PCIO class, composed of two students, graduated in February 1900 from the fledgling College, then located at 21 South 12th Street.

The College prospered and moved through a number of sites in its first century, including 1715 North Broad Street, 832 Pine Street, 19th and Spring Garden, 48th and Spruce, and finally, City Avenue. During this growth period, the medical curriculum intensified, osteopathic research was initiated, and clinic and hospital services grew rapidly as the medical school’s student body and faculty expanded dramatically.

The medical program trains students who will become skilled, caring and successful physicians guided by the strengths of osteopathic principles refined during a century of medical practice, teaching and research. We at PCOM are proud of our osteopathic heritage. More than 60,000 osteopathic physicians practicing today are an integral part of America’s health care delivery system. Today, all treatment modalities are available to osteopathic physicians, who may prescribe drugs, perform surgery and specialize in any area of medicine. DOs, whose primary care training prepares them to be superior diagnosticians, are represented throughout the United States and in all branches of military service.

After nearly a century of training physicians, PCOM opened its first graduate degree program, the Master of Science in Biomedical Sciences, in 1993. The first five graduates in June 1995 marked the beginning of yet another period of growth for the College – the development of a graduate school. Fifteen years later, more than 800 graduate students are enrolled in PCOM’s master’s and doctoral degree programs. PCOM’s graduate students pursue studies at the master’s level in biomedical sciences, counseling and clinical health psychology, school psychology, organizational development, forensic medicine and physician assistant studies. Doctoral-level study is offered in clinical psychology and school psychology with certificate programs for professionals seeking respecialization in clinical psychology or certification as school psychologists.

In August 2005, the first entering osteopathic medical class began their studies at Georgia Campus – Philadelphia College of Osteopathic Medicine (GA-PCOM), the College’s new branch campus located in Suwanee, Georgia, a suburb of Atlanta. GA-PCOM’s mission is to help fill the need for more physicians and other health professionals in Georgia and the surrounding states, areas that have been affected by population increases and subsequent shortages. The Master of Science in Biomedical Sciences program was inaugurated at the Georgia Campus



in the 2006-2007 academic year, and a School of Pharmacy opened in Fall 2010.

Nearly 70 percent of main campus students are Pennsylvanians, and 75 percent of the Georgia Campus students are from the southeastern states. More than 200 colleges and 21 states are represented in the student body. Supported by the best modern technology, PCOM emphasizes a practitioner-scholar approach and community orientation in all of its degree programs to prepare students for the new challenges facing the behavioral and the medical sciences in the 21st century.

## **THE DEGREES AND CERTIFICATES AWARDED**

Doctor of Osteopathic Medicine (DO)  
– Philadelphia and Georgia Campuses

Doctor of Pharmacy (PharmD)  
– Georgia Campus

Doctor of Psychology (PsyD) – Clinical Psychology  
– Philadelphia Campus

Doctor of Psychology (PsyD) – School Psychology  
– Philadelphia Campus

Master of Science in Counseling and Clinical Health Psychology (MS)  
– Philadelphia Campus

Master of Science in School Psychology (MS)  
– Philadelphia Campus

Educational Specialist in School Psychology (EdS)  
– Philadelphia Campus

Certificate of Graduate Studies in Organizational Development and Leadership  
– Philadelphia Campus

Master of Science in Organizational Development and Leadership (MS)  
– Philadelphia Campus

Certificate of Advanced Graduate Studies in Psychology (CAGS Certificate)  
– Philadelphia Campus

Master of Science in Biomedical Sciences (MS)  
– Philadelphia and Georgia Campuses

Certificate of Graduate Study in Biomedical Sciences  
– Philadelphia and Georgia Campuses

Master of Science in Health Sciences – Physician Assistant Studies (MS)  
– Philadelphia Campus

Master of Science in Forensic Medicine (MS)  
– Philadelphia Campus

Clinical Master of Science (MSc)  
– Philadelphia Campus

## **Matriculation and Degree Conferral**

Matriculation and attendance at the College are privileges granted to the student in consideration of performance of specified assignments and the maintenance of established standards of personal and professional conduct. The College reserves the right, and the student, by the act of matriculation, concedes to the College the right to require withdrawal at any time the College deems it necessary to safeguard PCOM standards of scholarship, conduct and compliance with regulations, or for such other reasons deemed appropriate by the College. If the Senior Vice President for Academic Affairs or the President determines that the presence of a student would be disruptive to the College or represents a possible threat to the safety of faculty, students, staff, patients, clients or others, the Senior Vice President for Academic Affairs or the President may immediately withdraw the student in question from all activities, placing the student on leave of absence pending investigation, required documentation and/or referral for committee action.

Each candidate for a degree or certificate of graduate study must be free of indebtedness to the College. Neither a diploma nor an academic transcript will be given until all financial obligations to PCOM have been met.

## **Accreditation**

PCOM is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104; 215-662-5606. The Commission on Higher Education is recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation. In 2005, the Commission approved the extension of the scope of institutional accreditation to PCOM's Georgia branch campus.

The College is also approved by the Department of Education of the Commonwealth of Pennsylvania, which granted recognition in 2004 to GA-PCOM as an approved PCOM branch campus. GA-PCOM is authorized by the Nonpublic Postsecondary Education Commission of Georgia as a branch campus of PCOM.

The doctor of osteopathic medicine programs at PCOM are accredited by the Commission on Osteopathic College Accreditation of the American Osteopathic Association.

PCOM's physician assistant program is accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA).

The doctoral program in clinical psychology is accredited by the Committee for Accreditation of the American Psychological Association (APA), 202-336-5979; [www.apa.org/ed/accreditation](http://www.apa.org/ed/accreditation).

The doctoral, educational specialist and M.S. programs in school psychology are approved by the National Association of School Psychologists (NASP). The

certification program in school psychology is approved by the Department of Education, Commonwealth of Pennsylvania. PCOM's PsyD in school psychology is also approved by the Association of State and Provincial Psychology Boards (ASPPB) for its listing of programs meeting designation criteria.

The Doctor of Pharmacy program of the PCOM School of Pharmacy was awarded precandidate accreditation status during the June 23-27, 2010 meeting of the Board of Directors of the Accreditation Council for Pharmacy Education (ACPE), based upon an on-site evaluation conducted April 27-29, 2010, and discussion with College and School officials. Following the enrollment of the inaugural class of students in Fall 2010, an on-site evaluation will be scheduled during the 2010-2011 academic year for purposes of gathering additional information to be considered in the Board's consideration of advancement to candidate accreditation status. Based upon this evaluation, should the Board feel that candidate accreditation status cannot be conferred, the School could respond to the Board's concerns and reapply prior to the graduation of the first class. If candidate accreditation status is not granted even after reapplication, graduates may not be eligible for licensure as pharmacists. If candidate accreditation status is granted and the program continues to develop as planned, full accreditation status of the Doctor of Pharmacy program would be considered by the Board following the graduation of students from the program.

The Accreditation Council for Pharmacy Education accredits Doctor of Pharmacy programs offered by colleges and schools of pharmacy in the United States and selected non-US sites. For a Doctor of Pharmacy program offered by a new college or school of pharmacy, ACPE accreditation generally involves three steps: precandidate accreditation status, candidate accreditation status, and full accreditation status. Precandidate accreditation status denotes a developmental program that is expected to mature in accordance with stated plans and within a defined time period. Precandidate accreditation status is awarded to a new program of a college or school of pharmacy that has not yet enrolled students in the professional program and authorizes the school to admit its first class. Candidate accreditation status is awarded to a Doctor of Pharmacy program that has students enrolled but has not yet had a graduating class. Full accreditation status is awarded to a program that has met all ACPE standards for accreditation and has graduated its first class. Graduates of a class designated as having candidate accreditation status have the same rights and privileges of those graduates from a fully accredited program. ACPE conveys its decisions to the various boards of pharmacy and makes recommendations in accordance with its decisions. It should be noted, however, that decisions concerning eligibility for licensure by examination or reciprocity reside with the respective state boards of pharmacy in accordance with their state statutes and administrative rules.

For additional details on ACPE accreditation, please go to <http://www.acpe-accredit.org/>.

Documents of accreditation are on file in the President's Office, with copies in the Office of the Senior Vice President for Academic Affairs, and may be seen upon request.

### **Memberships**

PCOM is a member of the American Council on Education, the Association of Academic Health Centers, the American Association of Colleges of Osteopathic Medicine and the Council for the Advancement and Support of Education.

### **Student Handbooks and Academic Program Handbooks Containing Vital Student Information**

College policies and other student information are available in the student handbooks, which are available online through Nucleus. The General Student Handbook, which applies to all academic programs, describes educational resources and essential services, registration, campus regulations, insurance, extracurricular activities and student government, and College policies on privacy, sexual harassment, equal opportunity, grievances, safety, substance abuse, ethics and conduct.

Each program of study also publishes an academic handbook that describes curriculum, graduation requirements, examination and grading policy, academic standards, remediation procedures, clinical education requirements and other academic and student support information specific to the respective degree program. The academic handbooks are available on Nucleus, as well as in each academic department office.

## ADMINISTRATION

Matthew Schure, PhD . . . . .	President and Chief Executive Officer
Kenneth J. Veit, DO '76, MBA . . . .	Senior Vice President for Academic Affairs and Dean
Peter Doulis, CPA . . . . .	Vice President for Finance and Chief Financial Officer
Florence D. Zeller, MPA, CFRE . . .	Vice President for Alumni Relations and Development
Robert G. Cuzzolino, EdD . . . . .	Vice President for Graduate Programs and Planning
H. William Craver, DO . . . . .	Interim Dean and Chief Academic Officer, Osteopathic Medical Program, Georgia Campus
Mark Okamoto, PharmD . . . . .	Dean and Chief Academic Officer, School of Pharmacy, Georgia Campus
John Fleischmann, EdD . . . . .	Campus Executive Officer, Georgia Campus
Richard A. Pascucci, DO '75 . . . .	Vice Dean, Clinical Education
Richard M. Kriebel, PhD . . . . .	Senior Associate Dean for Preclinical Education and Research
Carol A. Fox, MM . . . . .	Associate Vice President for Enrollment Management
Michael J. Deimling, RPh, PhD . . .	Associate Dean, Academics and Assessment, School of Pharmacy, Georgia Campus
Eugene Mochan, PhD, DO '77 . . .	Associate Dean for Primary Care and Continuing Education
Tina Woodruff, EdD . . . . .	Assistant Dean for Student Affairs
John Bulger, DO '95 . . . . .	Regional Assistant Dean, Geisinger Health System

Etheldra Templeton, MLS . . . . . Executive Director and Chair, Library and Educational Information Systems

Timothy A. Poole, PharmD . . . . . Chair, Department of Pharmacy Practice, School of Pharmacy, Georgia Campus

Avadhesh C. Sharma, PharmD, PhD . . . . . Chair, Department of Pharmaceutical Sciences, School of Pharmacy, Georgia Campus

Gary H. Watson, PhD . . . . . Chair, Division of Basic Sciences, Osteopathic Medical Program, Georgia Campus

Laura G. Bell . . . . . Director of Risk Management and Insurance

Deborah A. Benvenger, MBA . . . . . Director of Admissions

John J. Carlin, MBA . . . . . Director of Financial Operations

Deborah A. Castellano, MS . . . . . Registrar

Jane Z. Dumsha, PhD . . . . . Director of Research and Sponsored Programs

Rita C. Forde, MBA . . . . . Director of Human Resources

Dean S. Gray . . . . . Director of Materials Management

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Nancy L. Martorano, MS . . . . . Director of Financial Aid

Allan M. McLeod, DO '88, JD, MBA . . . . . Director of Undergraduate Clinical Education

C. Andrew Mueller, MBA . . . . . Director of Financial Reporting and Planning

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Pamela J. Ruoff, MS . . . . . Director of Alumni Relations and Development

James A. Williams, MS . . . . . Director of Management Information Systems and Telecommunications

Frank H. Windle . . . . . Director of Physical Plant

James J. Wood . . . . . Director of Animal Facility

## **BOARD OF TRUSTEES**

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Eugene B. Chaiken, LLD (Hon.) . . Vice Chair

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Kenneth J. Veit, DO '76, MBA . . . . Senior Vice President for Academic Affairs  
and Dean

Peter Doulis, CPA . . . . . Vice President for Finance and Chief  
Financial Officer

Florence D. Zeller, MPA, CFRE . . . Vice President for Alumni Relations and  
Development

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Planning

Lavinia Lafferty . . . . . Executive Assistant to the President and  
Secretary

Joan McGettigan . . . . . Assistant to the President and Assistant  
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Lita Indzel Cohen, Esquire

James H. Black, DO '62, LLD (Hon.)

Terry Coleman

J. Steven Blake, DO '89

Joseph A. Dieterle, DO '70

John B. Bulger, DO '95

Elizabeth H. Gemmill, Esquire

Eugene B. Chaiken, LLD (Hon.)

Thomas J. Gravina



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Vincent Lobo, DO '65

Herbert Lotman, LLD (Hon.)

Robert S. Maurer, DO '62\*

Paul W. McGloin, CPA, LLD (Hon.)

Louis P. Meshon Sr.

Andrea D. Pedano, DO '90

Matthew Schure, PhD

Wayne T. Sikes

Etheldra Templeton\*\*

Kenneth J. Veit, DO '76, MBA

Murray Zedeck, DO '62

\* Alumni Representative

\*\* Faculty Representative

# ADMISSIONS POLICIES AND PROCEDURES

## Doctor of Osteopathic Medicine (DO)

Admission to PCOM is competitive and selective. Acceptance by the Faculty Committee on Admissions is based on the applicant's fulfillment of undergraduate course requirements, grade point average (GPA), Medical College Admission Test (MCAT) scores and a personal interview with the committee.

PCOM seeks well-rounded, achievement-oriented persons whose character, maturity and sense of dedication point to a productive life as an osteopathic physician. PCOM is an institution that has historically sought diversity in its student population and actively recruits under-represented minority students and non-traditional students, including veterans, who often offer exceptional potential for becoming outstanding physicians.

### **Requirements for Admission**

Prior to matriculation at either campus site, each applicant must meet the following PCOM admission requirements.

1. Satisfactory completion of a bachelor's degree from a regionally accredited college or university is necessary. Applications from students with three years of exceptional undergraduate work completed may be considered.
2. The satisfactory completion of these specific undergraduate semester hours must be demonstrated by the applicant.
  - Eight semester hours each, including two semester hours of laboratory: general chemistry, organic chemistry, biology and physics.
  - Six semester hours of English composition and literature.
3. Each applicant must sit for the Medical College Admission Test, which is given multiple times each year. Prospective students are urged to take the test as early as possible and certainly not later than August of the year prior to desired matriculation. The MCAT must be taken within three years of desired matriculation.

### **Application Steps and Schedule**

All inquiries about admission to the DO program should be directed to PCOM's Office of Admissions. PCOM participates in the centralized online application service for the colleges of osteopathic medicine, AACOMAS.

1. Beginning in May, prospective osteopathic medical students may submit their application through a secure Web server, AACOMAS-Online, at [www.aacom.org](http://www.aacom.org). The AACOMAS application should be complete and indicate the campus to which the prospective osteopathic medical student is

applying. The application must be accompanied by the required fee. The application will be processed once all official transcripts and MCAT scores are received by AACOMAS and will be forwarded to PCOM.

2. When the processed application is received in the PCOM Admissions Office from AACOMAS, applicants will receive a PCOM supplemental application via electronic notification to their e-mail address as provided on the AACOMAS application. This must be completed, signed and returned, along with a fee of \$50.
3. A letter of recommendation is required from the premedical committee or premedical advisor of the undergraduate college that granted or will grant a bachelor's degree, regardless of academic major, course of study or date of graduation. If that is not possible, a letter from the academic advisor or dean of the same institution may substitute.
4. Another letter of recommendation, preferably from an osteopathic physician, is strongly suggested but not required.
5. All applications and transcripts to AACOMAS must be submitted no later than February 1 of the year of desired matriculation. PCOM supplemental applications and all supporting credentials must be received in the Admissions Office by March 1. Early application and fulfillment of all credential requirements is strongly recommended, since a rolling admissions process is followed with review of applications beginning in July.

### **Interviews**

Each campus has a PCOM Faculty Committee on Admissions that will review all completed applications, select those applicants to be interviewed and inform them in writing, via e-mail, of the interview date, time and place. Although all applicants who are eventually accepted must be interviewed, the granting of an interview should not be construed as evidence of final acceptance.

Interviews begin in September for the Philadelphia Campus and in October for the Georgia Campus and continue through March. Most interview sessions are conducted in the morning with some scheduled in the afternoon. During the course of the morning or afternoon, applicants have an opportunity to meet with a representative from the Financial Aid Office, sit in on classes and tour the campus. PCOM conducts a panel interview that includes the applicant, an osteopathic physician and another member of the committee and lasts about one half hour.

### **Admissions Decision**

Interviewed candidates are usually notified within one month from the date of interview. Accepted applicants are asked to send a \$250 non-refundable tuition prepayment according to the following schedule:

- Those accepted prior to November 15 will have until December 14.
- Those accepted between November 15 and January 14 will have 30 days.
- Those accepted between January 14 and June 14 will have 14 days.
- Those accepted on or after June 15 may be asked for an immediate deposit.

An additional deposit of \$2,000 is required on April 15 from all confirmed students. This fee is non-refundable and, along with the initial \$250 deposit, will be credited to the student's tuition account.

PCOM does not have an Early Decision Program.

To ensure that students accepted to PCOM will be permitted to perform clerkships during their third and fourth clinical years, and thus ensure them the opportunity to successfully complete their DO degree requirements, PCOM now requires all first year students to complete a criminal background check prior to matriculation. All students must have their criminal background checks processed through PreCheck. The Admissions Office must have this information on file prior to orientation; students will not be allowed to start classes without this information.

During the summer months, when the admissions process is complete, candidates who are not accepted may request in writing information about their application or make an appointment with an admissions counselor.

### **Transfer Students**

PCOM does not routinely accept transfer students; however, a transfer application may be considered under extenuating circumstances and depending on places available in the class. Consideration will be given only to a student who is in good standing at an AOA-accredited college of osteopathic medicine or who is eligible for re-admission to the previously attended college of osteopathic medicine.

The initial request for transfer must originate from the dean of the college or university from which the student wishes to transfer and must be directed to the dean of the PCOM campus to which he or she is applying. Application materials must be submitted and a formal interview with the Faculty Committee on Admissions will be required.

If accepted, a transfer student will be given credit for courses successfully passed at the previous college that meet PCOM's curriculum requirements. A minimum of two years must be completed at PCOM for a student to be eligible to receive the DO degree.

## Technical Standards for Matriculation

All PCOM applicants and enrolled students must meet the technical standards set forth below. Accepted candidates are asked to review and acknowledge PCOM's technical standards for admission and matriculation.

The holder of a DO degree must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. In order to carry out the activities described below, candidates for the DO degree must be able to consistently, quickly and accurately integrate all information received, and they must have the ability to learn, integrate, analyze, and synthesize data in the classroom and clinical settings. All students must demonstrate the competencies required by faculty and must have the capabilities to complete their course of study in a reasonably independent manner. The standards are:

**Observation and Sensory Skills:** Candidates and students must have sufficient vision to be able to observe demonstrations, experiments, and laboratory exercises in the basic sciences. They must be able to observe a patient accurately at a distance and close at hand for proper evaluation and treatment integration.

**Communication Skills:** Candidates and students should be able to speak, hear and observe patients in order to elicit information, examine patients, describe changes in mood, activity and posture, and perceive non-verbal communications. They must be able to communicate effectively and sensitively with patients. Communication includes not only speech but also reading and writing. They must also be able to communicate effectively and efficiently in oral and written form with all members of the health care team.

**Motor Skills:** Candidates and students should have sufficient motor function and strength and mobility to execute movements required to provide general care and emergency treatment to patients. Examples of emergency treatment required of physicians are cardiopulmonary resuscitation, administration of intravenous medication, the application of pressure to stop bleeding, the opening of obstructed airways, the suturing of simple wounds, and the performance of simple obstetrical maneuvers. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision. Additionally, to perform osteopathic manipulation, upright posture with sufficient lower extremity and body strength is required.

**Conceptual, Integrative, and Quantitative Skills:** These skills include measurement, calculation, reasoning, analysis and synthesis. Problem solving, the critical skill demanded of physicians, requires all of these intellectual abilities. In addition, candidates and students should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures.

**Behavioral and Social Skills:** Candidates and students must possess the emotional health required for full utilization of their intellectual abilities, the

exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients, and the development of mature, sensitive and effective relationships with patients. Candidates and students must be able to tolerate physically taxing workloads and to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that will be assessed during the admissions and the educational processes.

### **Technical Standards for Osteopathic Manipulative Medicine and Physical Diagnosis**

A core component of osteopathic medical education is using touch for diagnosis and therapeutic purposes. To acquire competencies in physical diagnosis and osteopathic manipulative medical diagnosis and treatment, all students are required to touch others and to be touched.

The College realizes that emergencies may occur after matriculation, and will address these concerns as the need arises.

### **Professional Expectations**

Students are expected to adhere to a standard of behavior and conduct consistent with the high standards of the healing and scientific profession. All students are expected to:

1. Respect the right of their fellow students to pursue their studies in a professional environment conducive to study.
2. Maintain professional interpersonal relationships by demonstrating civility and respect for each other.
3. Uphold the highest standard of academic honesty and integrity.
4. Show respect for the diversity that exists among students, faculty and patients in regard to disability, social background, age, gender, religious beliefs, race, sexual orientation, and particular disease process.
5. Fulfill their responsibilities to their peers and patients in group work, including clinical clerkships and outside training assignments.
6. Adhere to all of the policies of the College, including those prohibiting discrimination or harassment.

PCOM maintains a curriculum that stresses the importance of the body as a unit, and the applicability of touch as an integral part of diagnosis and therapy for all patients of both genders. As part of this training, students will participate in physical examination and osteopathic manipulative treatment by fellow students.

This physical examination is critical to learning the skills required of practicing osteopathic physicians; therefore, it is mandatory that all matriculating students understand and accept these responsibilities. These responsibilities include:

1. Adhere to appropriate dress as determined by the faculty, i.e. gym shorts, tee shirt, sports bra, as necessary to participate in the physical examination experience.
2. Allow other students to see and touch them so that all become proficient in physical diagnosis and manipulative treatment.
3. Assume the role of the patient to develop an understanding of the patient experience.
4. Demonstrate professional demeanor at all times.

Students also understand that they are required to meet all of the standards and expectations for classroom testing and assessment.

### **English Proficiency Requirement**

Every applicant whose native language is not English, or whose undergraduate instruction was not in English, must provide an English proficiency test score. Any applicant whose native language is not English must demonstrate objective competency in English by satisfactory performance on the Test of English as a Foreign Language (TOEFL). A score is considered too old, and will not be accepted, if it is more than two years old from the start of the applicant's admissions term. Country of citizenship does not exempt applicants from this requirement. Language of instruction at the college or university level, and how recent it has been, are the determining factors in meeting this requirement. The minimum required score for the IBT (Internet Based Testing) is 79 and a minimum score of 26 is required for the speaking component. General writing assistance is available for theses and dissertations; however, as an institution offering only graduate and professional programs, PCOM does not offer remedial ESL coursework.

Applicants are exempt if:

1. English is the exclusive language of instruction at the undergraduate level; or
2. They have earned a degree from a regionally accredited U.S. college or university not more than five years prior to the anticipated semester of enrollment; or
3. They have completed at least two full-time semesters of graded coursework, exclusive of ESL courses, in a U.S. college or university, or at an institution outside the U.S. where English is the exclusive language of instruction, not more than five years prior to the anticipated semester of enrollment.

## Doctor of Pharmacy (PharmD)

Admission to PCOM School of Pharmacy – Georgia Campus is competitive and selective. PCOM seeks well-rounded, achievement oriented individuals whose maturity and dedication will lead them to a successful career as a pharmacist. Acceptance by the Admissions Committee is based on the applicant's fulfillment of prerequisite coursework, grade point average (GPA), Pharmacy College Admission Test (PCAT) scores, letters of recommendation and a personal interview.

### **Requirements for Admission**

Satisfactory completion of the required prerequisite coursework from an accredited college or university is necessary. A baccalaureate degree, graduate degree or other professional degree is not required for admission to the School of Pharmacy; however, students possessing a previous degree will be given additional consideration for admission. Prior to matriculation, competitive applicants must have completed the prerequisite coursework and obtained a cumulative grade point average of 2.50 or higher on a 4.0 scale for all undergraduate coursework completed. All science and math prerequisites must have been completed within the last 10 years with a letter grade of "C" or higher. There is no minimum score for the PCAT; however, composite scores less than 50% or individual subtest scores less than 25% are less likely to be competitive. Prerequisite courses are as follow:

General Biology I and II with live lab . . . . .	8 credits*
(cellular or molecular biology with live lab or zoology with lab are also acceptable)	
General Chemistry I and II with live lab . . . . .	8 credits
Organic Chemistry I and II with live lab . . . . .	8 credits
Physics with live lab . . . . .	4 credits
Calculus . . . . .	3 credits
Introductory Statistics . . . . .	3 credits
English Composition . . . . .	6 credits
(3 credits from English Literature is also acceptable)	
Economics . . . . .	3 credits
Speech . . . . .	3 credits
Social/ Behavioral Science . . . . .	3 credits
(i.e., History/Psychology/Sociology/Ethics)	
Humanities . . . . .	3 credits
(i.e., Art, Foreign Language, Music, Religion)	
Electives . . . . .	8 credits

\*Credits are listed as semester credits. To determine equivalent quarter credits, multiply semester credits by 1.5 (2 semester credits = 3 quarter credits).

### **Application Steps and Schedule**

All inquiries about admission to the Pharmacy program should be directed to



PCOM's Office of Admissions, 4170 City Avenue, Philadelphia, PA 19131, (215) 871-6700 or (800) 999-6998. PCOM School of Pharmacy – Georgia Campus participates in the centralized Pharmacy College Application Service (PharmCAS) for applicants applying to colleges and schools of pharmacy. Application to PCOM School of Pharmacy – Georgia Campus consists of a completed PharmCAS Application and a PCOM School of Pharmacy Supplemental Application.

Beginning in June, prospective pharmacy students may submit their application through PharmCAS [www.pharmacas.org](http://www.pharmacas.org). The PharmCAS application will include all undergraduate and graduate coursework, official transcripts, three letters of recommendation and PCAT score(s). PharmCAS applications must be completed no later than March 1 of the year of desired matriculation; however, applicants are encouraged to apply well ahead of this date.

Upon receipt of the PharmCAS Application by the Office of Admissions, a PCOM School of Pharmacy Supplemental Application will be sent via e-mail and must be completed, signed, and sent, along with the \$50 fee, directly to the PCOM Office of Admissions address printed on the application. The deadline for the PCOM School of Pharmacy Supplemental Application is April 1 of the year of desired matriculation.

When the PharmCAS Application, including transcripts, letters of recommendation, and PCAT score(s), as well as the PCOM School of Pharmacy Supplemental Application (including fees) is received in the Office of Admissions, the application will be considered complete. Early application and fulfillment of all requirements is strongly recommended, because a rolling admissions process is followed with review of completed applications beginning in early Fall.

### **Interviews**

All applications are processed in Philadelphia, PA; however, interviews are conducted at the PCOM School of Pharmacy – Georgia Campus in Suwanee, Georgia and are scheduled by e-mail using the e-mail address indicated on your admissions application. Please check your e-mail frequently and be sure to notify us of any change.

Interviews begin in October and continue until the class has been selected. During the course of the interview sessions, applicants will have an opportunity to meet with a representative from the Financial Aid Office and tour the campus. PCOM conducts a panel interview that includes the applicant and several faculty members from the School of Pharmacy. Each interview lasts approximately one half hour.

### **Admissions Decisions**

Interviewed candidates are usually notified within one month from the date of interview. Accepted applicants are asked to send a non-refundable \$500 tuition

prepayment that will be credited to the student's tuition account. The School of Pharmacy does not have an Early Decision Program

PCOM requires all first year students to complete a criminal background check prior to matriculation. The Office of the Dean must have this information on file prior to orientation; students will not be allowed to start classes without this information. Confirmed students will be advised by the Admissions Office as to how and when to begin the process.

### **Transfer Students**

PCOM School of Pharmacy – Georgia Campus does not routinely accept transfer students; however, a transfer application may be considered under extenuating circumstances and depending on places available in the class. Consideration will be given only to a student who is in good standing at an ACPE-accredited college or school of pharmacy who is eligible for re-admission to the previously attended college or school. The initial request for transfer must originate from the dean of the college or school of pharmacy from which the student wishes to transfer and must be directed to the dean of the PCOM School of Pharmacy – Georgia Campus. Application materials must be submitted and a formal interview with the Admissions Committee will be required. If accepted, a transfer student will be given credit for courses successfully passed at the previous college that meet PCOM's curriculum requirements. A minimum of two years must be completed at PCOM for a student to be eligible to receive the PharmD degree.

### **Technical Standards for Matriculation**

All PCOM School of Pharmacy – Georgia Campus applicants and enrolled students must meet the technical standards set forth below. Accepted candidates are asked to review and acknowledge PCOM's technical standards for admission and matriculation.

The holder of a PharmD degree must have the knowledge, skills, attitudes and values to function in a variety of pharmacy practice settings. In order to ultimately perform the activities of a pharmacist, candidates for the PharmD degree must be able to consistently, quickly and accurately assimilate a large body of medical information received in a variety of formats including written, oral and sensory in order to prepare pharmaceutical plans for their patients. These plans may involve ongoing assessment and counseling as well as the preparation of prescription and nonprescription medications or dietary supplements. These activities involve not only intellectual ability, but also observational, communication, motor, and behavioral skills.

*Communication Skills:* A candidate must be able to read, write, speak and comprehend the English language with sufficient mastery to accomplish the following:

- Complete the didactic, clinical and laboratory curricular requirements in a timely, competent, professional and accurate manner

- Effective and efficient communication; in oral, written and computerized forms, with all members of the health care team
- Effective, compassionate and sensitive communication with patients. The focus of patient communication is to elicit information, examine, describe changes in mood, activity and posture, and perceive nonverbal communication
- Communication includes not only speech but also reading, writing, and computer literacy

*Observation and Sensory Skills:* Observation necessitates the functional use of the sense of vision and somatic sensation and is enhanced by the functional use of all of the other senses. Candidates and students must have sufficient visual acuity to be able to:

- Observe presentations, demonstrations, experiments, and laboratory exercises in the pharmaceutical and clinical sciences
- Observe a patient accurately at a distance and close at hand
- Interpret drug information in the form of printed and handwritten prescriptions, drug labels, package inserts, texts and electronic media

*Motor Skills:* A candidate should have sufficient fine and gross motor skills, equilibrium, strength, mobility, and functional use of the senses of touch and vision to accurately execute movements required in the practice of pharmacy. This would include, but is not limited to:

- Preparation of prescriptions through compounding, reconstitution, counting, pouring and weighing of liquids, tablets and powders
- Preparation of sterile solutions for ophthalmic or intravenous use
- Administering an IM/SQ injection
- Provision of general care and emergency treatment (e.g. first aid or cardiopulmonary resuscitation)
- Eliciting patient information through palpation, auscultation, percussion, and other diagnostic maneuvers

*Intellectual, Conceptual, Integrative, and Quantitative Skills:* Problem solving, the critical skill demanded of pharmacists, requires that the candidate must be able to:

- Measure, calculate, reason, analyze, record, and synthesize large amounts of complex information in a timely manner

- Comprehend three-dimensional relationships and understand spatial relationships
- Remain fully alert and attentive at all times in clinical settings

*Behavioral/Social Attributes:* Candidates must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, and the prompt completion of all responsibilities attendant to interaction with patients.

- Candidates must possess the ability to develop mature, sensitive, and effective relationships with patients
- Candidates must be able to tolerate physically taxing workloads and to function effectively under stress
- Candidates must be able to adapt to changing environments, to display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of many patients
- Candidates must possess compassion, integrity, concern for others, effective interpersonal skills, willingness and ability to function as an effective team player, interest and motivation to learn

### **English Proficiency Requirement**

Every applicant whose native language is not English, or whose undergraduate instruction was not in English, must provide an English proficiency test score. Any applicant whose native language is not English must demonstrate objective competency in English by satisfactory performance on the Test of English as a Foreign Language (TOEFL). A score is considered too old, and will not be accepted, if it is more than two years old from the start of the applicant's admissions term. Country of citizenship does not exempt applicants from this requirement. Language of instruction at the college or university level, and how recent it has been, are the determining factors in meeting this requirement. The minimum required score for the IBT (Internet Based Testing) is 79 and a minimum score of 26 is required for the speaking component. General writing assistance is available for theses and dissertations; however, as an institution offering only graduate and professional programs, PCOM does not offer remedial ESL coursework.

Applicants are exempt if:

1. English is the exclusive language of instruction at the undergraduate level; or
2. They have earned a degree from a regionally accredited U.S. college or university not more than five years prior to the anticipated semester of enrollment; or

3. They have completed at least two full-time semesters of graded coursework, exclusive of ESL courses, in a U.S. college or university, or at an institution outside the U.S. where English is the exclusive language of instruction, not more than five years prior to the anticipated semester of enrollment.

## ADMISSION TO GRADUATE PROGRAMS

### Department of Psychology

The Department of Psychology uses a rolling admissions policy. Therefore, applications will be considered throughout the year as received until the classes have been filled. Applications can be submitted online or retrieved by download from [www.pcom.edu](http://www.pcom.edu). The Admissions Committee screens the applications, invites some applicants for an interview, evaluates the applicants and selects the new students. The Admissions Committee reserves the right to accept or reject applications to the chosen program based on merit. Following the completion of the admissions process, each applicant is notified of the Admission Committee's decision in writing, including any conditions that must be satisfied prior to or following enrollment. Classes begin for each program as follows:

Doctor of Psychology in Clinical Psychology

– Fall term only

Master of Science in Counseling and Clinical Health Psychology

– Fall term only

Post-Doctoral Certificates in Clinical Health Psychology and Clinical Neuropsychology

– Fall term only

Doctor of Psychology in School Psychology

– Summer term only

Educational Specialist Degree in School Psychology

– Fall term only

Master of Science in School Psychology

– Summer term only

Master of Science in Organizational Development and Leadership

– Fall, Winter, Spring and Summer terms

Certificate of Advanced Graduate Studies (Psychology)

– Fall, Winter, Spring and Summer terms

### **Doctor of Psychology in Clinical Psychology (PsyD)**

An applicant to the doctor of psychology in clinical psychology program must have successfully completed a master's degree in psychology, social work, psychiatric/mental health nursing, counseling, school psychology, family therapy or pastoral counseling from a regionally accredited college or university, with a "B" average or better prior to matriculation. Master's degree programs in other

specialty areas will be considered on a case-by-case basis.

An applicant's undergraduate transcripts are used to evaluate the exposure the candidate has had to formal coursework in psychology. An undergraduate GPA of 3.0 or better is required.

In order to ensure that program courses are taught at the highest possible level, applicants must have also completed the following courses prior to admission:

- Statistics/Research
- Abnormal Psychology or Psychopathology
- Theories of Personality
- Developmental Psychology

The Department of Psychology uses the following information in making decisions concerning admission to the Clinical PsyD program:

1. Application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Personal and professional qualities as represented by:
  - Three completed reference forms with accompanying letters of recommendation
  - Graded writing sample or professional report or evaluation
  - Personal interview (at option of Admissions Committee)

All materials must be forwarded to PCOM's Office of Admissions.

### **Doctor of Psychology in School Psychology (PsyD)**

An applicant to the doctor of psychology in school psychology program must have completed a master's degree in school psychology or a related field at a regionally accredited college or university, with a grade point average of 3.00 or better.

Applicants must have completed, prior to admission, all courses required for state certification in school psychology. In addition, it is expected that all candidates will have had the equivalent of at least one 3-credit course in each of the core foundation areas for a degree in psychology as follows: ethics, research, statistics, psychometric theory, biological basis of behavior, cognitive-affective bases of behavior, social bases of behavior and individual differences. Transcripts will be carefully reviewed by the Admissions Committee and a plan for

remediation of any incomplete prerequisite requirements will be developed as a conditional acceptance into the program.

The Department of Psychology uses the following information in making decisions concerning admission to the School PsyD program:

1. Application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Official score report from PRAXIS II School Psychology Specialty Exam (0401)
4. Personal and professional qualities as represented by:
  - Three completed reference forms with accompanying letters of recommendation
  - Personal interview (at option of Admissions Committee)
  - Writing sample, requested at time of interview
5. Copy of certification as a School Psychologist

All materials must be forwarded to PCOM's Office of Admissions.

### **Educational Specialist Degree in School Psychology (EdS)**

An applicant to the educational specialist degree in school psychology program must have successfully completed a master's degree from a regionally accredited college or university in psychology, counseling, education or a related field with a "B" average or better prior to matriculation.

The Department of Psychology uses the following information in making decisions concerning admission to the EdS program:

1. Application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Official score report from Graduate Record Examination (GRE) Psychology Test #81
4. Official score report proving successful completion of PRAXIS I (reading, writing, math and listening)
5. Personal and professional qualities represented by:



- Three completed reference forms with accompanying letters of recommendation
- Personal interview (at option of Admissions Committee)

All materials must be forwarded to PCOM's Office of Admissions.

### **Master of Science in School Psychology (MS)**

An applicant must have successfully completed a bachelor's degree from a regionally accredited college or university in psychology, education or a related field with a "B" average or better prior to matriculation. Applicants must have also successfully completed the following courses prior to admission:

- 6 credits of English
- 6 credits of Math
- Abnormal Psychology/Psychopathology or Exceptional Children
- Child and/or Adolescent Psychology
- 9 credits of Psychology or relevant electives approved by the Admissions Committee to total 15 semester credit hours of preparation for graduate study in school psychology

The Department of Psychology uses the following information in making decisions concerning admission to the MS program in School Psychology:

1. Application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Official score report from the General Test of the Graduate Record Examination (GRE) or Miller Analogies Test (MAT)
4. Personal and professional qualities represented by:
  - Three completed reference forms with accompanying letters of recommendation
  - Personal interview (at option of Admissions Committee)

All materials must be forwarded to PCOM's Office of Admissions.

### **Master of Science in Counseling and Clinical Health Psychology (MS)**

An applicant to the master of science in counseling and clinical health psychology program must have successfully completed a bachelor's degree in psychology,

counseling, social work, or education from a regionally accredited college or university with a “B” average or better prior to matriculation. Bachelor’s degrees in other specialty areas will be considered on a case-by-case basis.

In order to ensure that program courses are taught at the highest possible level, applicants must have completed, prior to admission, at a bachelor’s level or above, the following courses:

- Introduction to Psychology
- Statistics/Research
- Abnormal Psychology/Psychopathology

The Department of Psychology uses the following information in making decisions concerning admission to the MS program in Counseling and Clinical Health Psychology:

1. Application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Official score report from the General Test of the Graduate Record Examination (GRE) or Miller Analogies Test (MAT)
4. Personal and professional qualities represented by:
  - Three completed reference forms with accompanying letters of recommendation
  - Personal interview (at option of Admissions Committee)
  - Writing sample, preferably graded

All materials must be forwarded to PCOM’s Office of Admissions.

### **Certificate of Advanced Graduate Studies Program in Psychology (CAGS)**

An applicant to the certificate of advanced graduate studies program in psychology must have successfully completed a master’s degree in psychology, social work, creative arts therapy, counseling, school psychology, marriage/family therapy or pastoral counseling from a regionally accredited college or university with a “B” average or better prior to matriculation. Master’s degrees in other specialty areas will be considered on a case-by-case basis.

The Department of Psychology uses the following information in making decisions concerning admission to the CAGS program:

1. Application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work

All materials must be forwarded to PCOM's Office of Admissions.

### **Master of Science in Organizational Development and Leadership (MS)**

An applicant to the master of science in organizational development and leadership program must have successfully completed a bachelor's degree from a regionally accredited college or university prior to matriculation.

The Department of Psychology uses the following information in making decisions concerning admission to the MS program in Organizational Development and Leadership:

1. Application, including an autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Personal and professional qualities as represented by:
  - One completed reference form with accompanying letter of recommendation
  - Personal interview (at option of Admissions Committee)

All materials must be forwarded to PCOM's Office of Admissions.

### **Department of Physician Assistant Studies**

#### **Master of Science in Health Sciences (MS)**

PCOM's physician assistant studies program is designed to prepare the student for comprehensive practice in a variety of clinical settings following completion of the second year of the program. The goals and objectives of the program are guided by the criteria set forth by the Standards and Guidelines for an Accredited Education Program for the Physician Assistant. The program has received full accreditation from the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), and graduates are eligible to sit for the National Commission on Certification of Physician Assistants (NCCPA) examination for national certification and regional, local and national licensure. Admission to the master of science program for physician assistant studies is very competitive. Applications will be reviewed by the Department of Physician Assistant Studies when the Central Application Service for Physician Assistants (CASPA) profile, PCOM supplemental application form, \$50 fee and supporting credentials are received in PCOM's Office of Admissions. Successful applicants will generally exceed the minimum criteria listed below.

## Requirements

It is the responsibility of each applicant to meet the following minimum requirements:

<u>SCIENCE AND MATH</u>	<u>CREDIT HOURS</u>	<u>NOTES</u>
General Biology I	4	With a lab
General Biology II	4	With a lab
Other Biology coursework	3	
Anatomy and Physiology	8	Can be taken as separate courses or combined as Anatomy and Physiology I and II
Inorganic Chemistry	8	With a lab
Other Chemistry coursework	3	e.g., Biochemistry, Organic Chemistry
Health Science	3	e.g., Physics, Nutrition, Immunology
Social Science	9	e.g., Psychology, Sociology
Math	6	Statistics is acceptable to meet Math requirement

- Completed all the above prerequisite coursework with a grade of at least either a “C” or 2.0 on a 4.0 scale.
- Obtained a minimum cumulative grade point average of 2.8 or higher on a 4.0 scale (as calculated by CASPA) for all undergraduate coursework completed.
- Documented 200 hours of patient contact experience in volunteerism or employment in the health care industry.
- Completed a baccalaureate degree in a science or health-related field from a regionally accredited college or university in the United States, Canada or the United Kingdom prior to matriculation.
- Submit three letters of recommendation, one from a physician, physician assistant or nurse practitioner.

Applicants with graduate degrees and/or five years of health care experience and/or other unique circumstances or qualifications may be considered on an individual basis for waiver of selected published requirements. However, all candidates must have earned a bachelor’s degree prior to enrollment, excluding dual degree candidates. Waiving of any criteria can only be assessed during the formal application review.

Applications are not accepted from individuals not eligible to be licensed as a physician assistant under the laws of the Commonwealth of Pennsylvania. At the time of application, candidates must have the prerequisites completed or

be able to provide a plan in writing that demonstrates the completion of the prerequisites prior to enrollment in the program. All science and math prerequisites must have been completed within the last ten years.

### **Application Process**

The PA program at PCOM participates in the Central Application Service for Physician Assistants (CASPA). CASPA is a Web-based application service that allows applicants to apply online; visit [www.caspaonline.org](http://www.caspaonline.org) or request a paper application from CASPA. In either case, all application materials must be submitted to CASPA no later than December 1, 2010, along with their required processing fee. CASPA accepts 2010-2011 applications after April 15, 2010. PCOM supplemental applications which will be sent via e-mail to candidates upon receipt of the CASPA application to Admissions, must be received no later than January 1, 2011 along with a \$50 application fee. The PA program utilizes a rolling admissions policy; therefore early applicants have the greatest chance of successful admission.

Send official transcripts from all colleges and universities attended directly to CASPA. (Upon matriculation, however, official transcripts must be forwarded directly to PCOM for file completion.)

Three letters of recommendation should be sent to CASPA directly from the recommenders. The letters will be reproduced and forwarded to PCOM.

When all credentials are on file, they will be verified, processed and sent to PCOM. At that time, supplemental applications will be added to the processed CASPA file and the complete application file will be evaluated for admission.

The Admissions Committee reserves the right to accept or reject applications to the chosen program based on merit. Interviews will be offered to those who qualify. Typically, interviews are conducted weekly from September to March. Following completion of the admissions process, applicants will be notified of the Admissions Committee's decision in writing, including any conditions that must be satisfied prior to or following enrollment.

For questions regarding the CASPA application, assistance is available by e-mailing [caspainfo@caspaonline.org](mailto:caspainfo@caspaonline.org) or by calling 617-612-2080.

### **Policy on Advanced Standing, Transfer of Credit and Experiential Learning**

The physician assistant program does not offer advanced placement based upon transfer of credits for academic work completed at other institutions of higher learning or upon credit for experiential learning. Applications are not accepted from graduates of medical schools.

## **Forensic Medicine**

The forensic medicine programs use a rolling admissions policy. Therefore, applications will be considered throughout the year as received until the classes have been filled. Applications can be submitted online or by download from [www.pcom.edu](http://www.pcom.edu). The Admissions Committee screens the applications, invites some applicants for an interview, evaluates the applicants and selects the new students. The Admissions Committee reserves the right to accept or reject applications to the chosen program based on merit. Following completion of the admissions process, applicants will be notified of the Admissions Committee's decision in writing, including any conditions that must be satisfied prior to or following enrollment. Classes begin for each program as follows:

Pathway – Summer term only

Master of Science in Forensic Medicine – Fall term only

### **Pathway Program**

Applicants to the Pathway program in forensic medicine must meet the following requirements:

1. Application, including autobiographical statement and \$50 application fee
2. Successful completion of a bachelor's degree from a regionally accredited college or university with a cumulative grade point average of 3.0 or higher on a 4.0 scale prior to matriculation. The bachelor's degree must be completed before the start of Pathway in May.
3. Official transcripts from all undergraduate and graduate work
4. One completed reference form with accompanying letter of recommendation
5. Personal interview (at option of Admissions Committee)

All materials must be forwarded to PCOM's Office of Admissions.

### **Master of Science in Forensic Medicine (MS)**

Applicants to the master of science in forensic medicine program must meet the following requirements:

1. Application, including autobiographical statement and \$50 application fee
2. Successful completion of a bachelor of science degree in a life science discipline from a regionally accredited college or university with a cumulative grade point average of 3.0 or higher on a 4.0 scale prior to matriculation. Coursework must include the following with a grade of "C" or better:

– Biology I and II (with lab)

- Chemistry I and II (with lab)
- Anatomy & Physiology I and II (with lab)

Candidates who have not completed the aforementioned coursework must apply for admission through the Pathway program.

3. Official transcripts of all undergraduate and graduate work
4. One completed reference form with accompanying letter of recommendation
5. Personal interview (at option of Admissions Committee)

All materials must be forwarded to PCOM's Office of Admissions.

## **Biomedical Sciences**

### **Certificate in Biomedical Sciences**

The graduate program in biomedical sciences uses a rolling admissions policy. Therefore, applications will be considered throughout the year as received until the classes have been filled. Each campus (Philadelphia and Georgia) has a separate application for the biomedical sciences program. Applications can be submitted online or by download from [www.pcom.edu](http://www.pcom.edu). The Admissions Committee reserves the right to accept or reject applications to the chosen program based on merit. Following the completion of the admissions process, each applicant is notified of the Admission Committee's decision in writing, including any conditions that must be satisfied prior to or following enrollment. Classes begin in the fall term; however, candidates may, in some cases, also be permitted to begin classes in the winter or spring terms.

Applicants for admission to the graduate program in biomedical sciences must meet the following requirements:

1. Successful completion of a bachelor's degree from a regionally accredited college or university prior to matriculation
2. Complete all undergraduate pre-professional science requirements
3. Show evidence of commitment to a career in the health professions and potential for admission to a professional school
4. Provide official score report from one of the following standardized tests: MCAT, DAT, OAT, GRE or PCAT

The following materials must be submitted for admission consideration:

1. A completed application, including autobiographical statement and \$50 application fee
2. Official transcripts of all undergraduate and graduate work
3. Official reports of standardized test scores
4. One letter of recommendation from the pre-professional advisor/committee or a science faculty member of the applicant's undergraduate institution

All materials must be forwarded to PCOM's Office of Admissions at the campus (Philadelphia or Georgia) where acceptance is being requested.

The admissions process of the certificate in biomedical sciences program is not related in any way to the admissions process of the doctor of osteopathic medicine program on either campus.

### **Master of Science in Biomedical Sciences (MS)**

All biomedical science graduate program students are accepted as certificate students and may make application for degree candidacy after matriculation in the certificate track (first year of study). Application for degree candidacy and selection of concentration begins immediately after the first academic term of the foundation course year. Applicants with satisfactory academic performance will be scheduled for a personal interview for admission to candidacy for the master of science degree in biomedical sciences.

The admissions process of the degree program in biomedical sciences (MS) is not related in any way to the admissions process of the doctor of osteopathic medicine program on either campus.

To request additional information about any of the Philadelphia Campus graduate programs, please contact:

Office of Admissions  
Philadelphia College of Osteopathic Medicine  
4170 City Avenue  
Philadelphia, PA 19131  
800-999-6998 or 215-871-6700  
215-871-6719 (fax)  
gradadmissions@pcom.edu  
[www.pcom.edu](http://www.pcom.edu)

To request additional information about any of the Georgia Campus graduate programs, please contact:

Office of Admissions  
Georgia Campus – Philadelphia College of Osteopathic Medicine



625 Old Peachtree Road NW  
Suwanee, GA 30024  
800-282-4544 or 678-225-7531  
678-225-7509 (fax)  
GAAadmissions@pcom.edu  
[www.pcom.edu](http://www.pcom.edu)

### **English Proficiency Requirement**

Every applicant whose native language is not English, or whose undergraduate instruction was not in English, must provide an English proficiency test score. Any applicant whose native language is not English must demonstrate objective competency in English by satisfactory performance on the Test of English as a Foreign Language (TOEFL). A score is considered too old, and will not be accepted, if it is more than two years old from the start of the applicant's admissions term. Country of citizenship does not exempt applicants from this requirement. Language of instruction at the college or university level, and how recent it has been, are the determining factors in meeting this requirement. The minimum required score for the IBT (Internet Based Testing) is 79 and a minimum score of 26 is required for the speaking component. General writing assistance is available for theses and dissertations; however, as an institution offering only graduate and professional programs, PCOM does not offer remedial ESL coursework.

Applicants are exempt if:

1. English is the exclusive language of instruction at the undergraduate level; or
2. They have earned a degree from a regionally accredited U.S. college or university not more than five years prior to the anticipated semester of enrollment; or
3. They have completed at least two full-time semesters of graded coursework, exclusive of ESL courses, in a U.S. college or university, or at an institution outside the U.S. where English is the exclusive language of instruction, not more than five years prior to the anticipated semester of enrollment.

## **STUDENT LIFE**

In addition to the dedication to their professional development, PCOM students are actively engaged members of the “life” of the campus. Developing leadership skills and human understanding are integral to becoming a well-rounded and compassionate professional. PCOM has a very active student government program, which includes more than 50 professional student organizations. Students gain leadership experience within their class as well as by participating in community outreach programs, athletics and the arts.

### **Student Government Association**

The Student Government Association (SGA) is composed of elected representatives from each class and graduate/professional degree program. There is a Philadelphia Campus SGA and a Georgia Campus SGA, which collaborate on issues of importance to the entire PCOM student body. The SGA directs activities for the student body and speaks for students to the College administration. The SGA presidents on both campuses are elected by the student body, and the executive officers are drawn from representatives elected by each degree program. SGA is very active in defining standards for professionalism among PCOM's students. SGA meetings are held monthly.

Students are involved in College governance, serving on every major College committee and working with faculty to evaluate courses. Students also participate in accreditation evaluations conducted by national and professional accreditation agencies.

### **Professional and Social Societies**

Professional interests at PCOM are expressed through a variety of clubs and organizations, including the Student Osteopathic Medical Association and the Science in Medicine Club, as well as chapters of the American Academy of Osteopathy, the American College of Family Practitioners, the American Osteopathic Academy of Sports Medicine and the Sigma Xi National Research Society. Physician Assistant, Biomedical Sciences and Psychology students also have sponsored groups within their areas of professional interest and publish their own newsletters.

### **Multicultural Affairs**

PCOM is committed to maintaining an environment that promotes the well-being of all students, and to providing opportunities to celebrate the commonalities and differences among cultures. Full-time PCOM student affairs staff members serve as advisors to the various organizations and clubs on multicultural issues. There are a variety of student organizations on both campuses with culture-focused missions. These include the Student National Medical Association (SNMA), CAPS (Culturally Aware Psychology Students), the Asian-Pacific-American Medical Student Association and the Student Initiative for Cultural Competency.

PCOM's commitment to multicultural sensitivity goes beyond the classroom and the campus. The many initiatives undertaken annually include conferences for minority undergraduate students, hosting of regional meetings of professional societies, and an awards banquet honoring the contributions of minority physicians, hosted by the SNMA.

### **Career Services**

The Office of Student Affairs coordinates career planning support for all PCOM students. This includes individual guidance on writing a curriculum vitae and resume, support for the career search process and mock interview workshops.

### **Athletic Programs**

PCOM provides facilities for students to maintain their physical fitness, as well as their involvement in social and competitive athletics. The activity centers on both campuses feature well-equipped fitness centers, weight training rooms, stationary bikes, aerobics studios and game rooms.

The organized athletic clubs vary by campus, but the College has fielded teams in men's and women's rugby, soccer and volleyball. The teams compete in regional professional school leagues. Intramural volleyball, softball, basketball, deck hockey and roller hockey are also available. Organized classes in aerobics, kickboxing, Tai Chi, yoga, nutrition, indoor cycling, mat Pilates and functional medicine ball training are also well attended by students and staff alike. Runners and walkers regularly participate in regional and city-sponsored events in both Atlanta and Philadelphia, and in Philadelphia rowers have become involved with the clubs that scull on the Schuylkill River.

### **Health Insurance**

All PCOM students are required to have health insurance coverage. Students are eligible to enroll in PCOM's group health insurance plan. Insurance coverage for the student's spouse and dependent children (under age 19) is also available through the College group at the student's expense. There is a limited open enrollment period of one month for Personal Choice (usually in July). If a student or family member loses outside coverage due to a "life event" over which he or she has no control, he or she may be added to the PCOM plan within 30 days of the event. Dental HMO coverage is available for students on a voluntary basis. Open enrollment for the Dental HMO occurs during July, with no option to enroll or cancel at any later time until the next open enrollment month. Policies renew every year the student is still matriculated, unless canceled prior to the anniversary date. If a student chooses to elect his or her own plan, proof of coverage by a comparable insurance company must be submitted.

The PCOM Student Wellness Center maintains student health records, including the forms for the mandatory physical. Students are advised that routine and preventive health care would be best addressed by having a local personal primary care physician. If a student elects to utilize a PCOM medical practice, fees for consultations, lab work or diagnostic testing are submitted to the

student's health insurance for consideration for payment. Charges that exceed the payment made by the insurance, or denied payment, are left to the discretion of the individual provider for collection.

### **Student Housing**

The College does not provide student housing on or off campus at either of its campuses. However, the Office of Student Affairs serves as an informal resource by providing a channel on the student Web site (Nucleus) that enables students to post for roommates and available housing. Links to popular housing Web sites and area newspapers are also posted on the Nucleus housing channel.

Apartment complexes in the Philadelphia and Atlanta areas update their rental fees each spring, and lists are mailed to accepted students. Apartment complexes are also listed on the PCOM Web site (under "Student Life," then "Housing").

The College does not involve itself in student lease arrangements or student-landlord disputes and does not screen housing listings for accuracy. It is specified in listings that landlords are expected to comply with the Federal Fair Housing Act.

### **Policy of Fairness and Equal Opportunity**

PCOM subscribes to the principles and the laws of the Commonwealth of Pennsylvania, State of Georgia and the federal government pertaining to civil rights and equal opportunity, including Title IX of the 1972 Education Amendments and Section 504 of the Rehabilitation Act of 1973.

PCOM prohibits discrimination on the basis of age, race, color, gender, national origin, ancestry, sexual orientation, religion, creed, disability, marital status or any other legally protected status. This policy applies in recruitment and admission of students, employment of faculty and staff, and scholarship and loan programs. This policy is also followed in the operation of all other programs, activities and services of the College.

Evidence of practices inconsistent with this policy should be reported to the director of human resources, who is the designated coordinator of PCOM's non-discrimination program. Inquiries regarding compliance with the sex discrimination provisions of Title IX may also be directed to the assistant secretary for civil rights, Department of Education, Washington, D.C. At the state level, one can contact the Pennsylvania Human Relations Commission, Harrisburg, Pennsylvania, or the Georgia Commission on Equal Opportunity, Atlanta, Georgia.

### **Americans with Disabilities Act**

Reasonable accommodation for physical and/or learning disabilities in alignment with the Americans with Disabilities Act (ADA) guidelines will be made when complete supporting documentation has been presented. In determining what constitutes a reasonable accommodation, the College will consider the

requirements of the requested accommodation and the impact on the educational program.

PCOM will evaluate each accommodation request on an individual basis. Once accepted for admission, and prior to matriculation, students must take the responsibility for providing appropriate documentation of their need for accommodation. The documentation must clearly identify the disability and provide specific information on the manifestations of the disability and any accommodations needed to remediate those manifestations. Documentation must strictly adhere to the Guidelines for Requesting a Disability Accommodation. To request further information on the ADA, please contact the assistant dean of student affairs.

### **Family Educational Rights and Privacy Act (FERPA)**

The Family Educational Rights and Privacy Act of 1974 (FERPA) places certain limitations on the disclosure of personally identifiable student information maintained by PCOM with respect to students; limits access to academic records; and gives students certain rights with respect to educational records, including the right to access, the right to obtain copies, the right to seek correction of such records through informal and formal internal procedures, and the right to place a statement in such educational records explaining any information that they believe to be inaccurate or misleading.

Complaints regarding alleged violations of rights accorded students by the Family Educational Rights and Privacy Act or the regulations promulgated thereunder may be directed in writing to:

Family Educational Rights and Privacy Act Office  
Department of Education  
Room 4511, Switzer Building  
400 Maryland Avenue, SW  
Washington, D.C. 20202  
For more information, visit [www.ed.gov/offices/OM/fpco/index.html](http://www.ed.gov/offices/OM/fpco/index.html).

### **Directory Information**

PCOM considers certain information to be “directory information” under the Family Educational Rights and Privacy Act and, therefore, subject to disclosure without prior consent of the student. Unless written objection is received by the registrar, the College will treat the following as directory information to be released at the discretion of the Registrar’s Office: student name, address, telephone number, e-mail address, date and place of birth, dates of attendance, major field of study, degrees and awards received and names of undergraduate and/or graduate schools attended.

### **Access to Student’s Record**

Access to a student’s record may be granted to school officials determined to have a legitimate educational interest. The custodian of the records must determine

the legitimacy of each request.

A school official is determined to have a legitimate educational interest if the information requested is required for that official to:

- Perform appropriate tasks that are specified in his/her position/description or contract/agreement
- Perform a task related to the student's education
- Perform a task related to the discipline of a student
- Provide a service or benefit relating to the student or student's family such as health care, counseling, job placement or financial aid

The school official is not authorized to share this information with a third party without the student's written permission. Such information, when it has fulfilled its original purpose, should be returned to the originating office. All other access to a student's record is granted in accordance with the Family Educational Rights and Privacy Act.

### **Maintenance of Student Records**

There is one admissions file for each applicant per program for which he or she applies. This file is kept in the Office of Admissions.

When the student matriculates, the following materials are retained in the Office of the Registrar and all other materials in the applicant file are purged in accordance with the Family Educational Rights and Privacy Act of 1974, as amended. A student can request to review the information in his or her file with a ten day written notice to the Office of the Registrar.

Information retained in the file is as follows:

- Current application
- AACOMAS profile (DO students)
- CASPA profile (PA students)
- PHARMCAS profile (PharmD students)
- Transcripts
- Standardized test scores (i.e., MCAT, GRE, MAT)
- Letters of acceptance and prepayment
- Completed Technical Standards form
- Previous applications and decision-related correspondence
- Criminal background check

Other data accrued during the student's tenure at the College including, but not limited to, transcripts, board scores, academic status letters (i.e., probation, warning, dismissal), course related forms (i.e., withdrawal), name change, and

change of status documentation will be placed in the student's file.

Transcripts or grade reports from other institutions, criminal background check, copies of scores from national tests (MCAT, National Board, Praxis, etc.) and/or any other third party material will not be released by PCOM. Students must contact the institution that issued these documents to obtain copies.

### **Complaints Regarding Non-Compliance with AOA Accreditation Standards**

PCOM is committed to meeting and exceeding the standards for accreditation of colleges of osteopathic medicine as described by the American Osteopathic Association Commission on Osteopathic College Accreditation. A copy of the standards is available upon request from the Office of the Senior Vice President for Academic Affairs. Students in the doctor of osteopathic medicine program who believe that the College may not be in compliance with a standard of accreditation have the right to file a complaint through the following procedure:

1. A written, dated and signed complaint must be filed with the Office of Student Affairs at the Philadelphia and/or Georgia Campus.
2. Student Affairs will consult with the senior vice president for academic affairs and dean and form an ad hoc committee of faculty and students to investigate the complaint.
3. The results of the investigation shall include findings of fact, a determination of standard compliance or non-compliance, and recommended corrective actions. The results will be communicated in writing to the senior vice president for academic affairs, Student Affairs and the student complainant.
4. If corrective action is indicated, the dean will respond with a description/plan for such action within 30 days of receipt of the ad hoc committee results.
5. Records of all proceedings regarding complaints will be maintained by the Office of Student Affairs.
6. In the event that the student complainant is not satisfied with the ad hoc committee determination and/or corrective action, the student may communicate his/her complaint to:

Chairperson, Commission on Osteopathic College Accreditation  
American Osteopathic Association  
142 East Ontario Street  
Chicago, IL 60611-2864

### **Statement on Substance Abuse**

The College recognizes the importance of assisting students in their development of a lifestyle free from the use of illegal substances and the abuse of alcohol. The College disciplinary policy provides actions including permanent dismissal of

students who engage in alcohol abuse, and the use, sale or distribution of illegal substances. The dean may require psychological assessment or toxicological (urine) testing of any student suspected of substance abuse. Details of the legal sanctions under applicable federal, state and local alcohol and drug laws, and the Pennsylvania and Georgia vehicle codes and Pharmacy Acts are available in the Offices of the Senior Vice President for Academic Affairs and Student Affairs.

### **AOA Code of Ethics**

The American Osteopathic Association has formulated this code to guide its member physicians in their professional lives. The standards are designed to address the osteopathic physician's ethical and professional responsibilities to patients, society, the AOA, others involved in healthcare and self. The AOA Code of Ethics has been adopted as a standard for professional conduct for PCOM's students in the osteopathic medical programs. The AOA Code of Ethics is reproduced in the student handbook for the osteopathic medical program at the Philadelphia and the Georgia campuses.



## ACADEMIC INFORMATION AND POLICIES

PCOM has three academic terms that consist of 13 weeks in each term, followed by a summer session. All courses are defined on the basis of credit hours for which one credit hour is equal to 14 hours of classroom or classroom equivalent instruction, exclusive of final examinations.

### **Grading Policy**

Course coordinators determine the means by which the final grade will be computed, which may include exam scores, written assignments, laboratory exercises, practical examinations, class participation and other means of evaluation. Courses are graded in accordance with the following system:

### **Doctor of Osteopathic Medicine**

Doctor of Osteopathic Medicine program grading structure is on a numeric scale from 0-100 for the first two years with 70 being passing grade. In the clinical years the grading structure is Honors Pass, High Pass, and Pass.

### **Doctor of Pharmacy Program**

Doctor of Pharmacy program grade point average is based on a 4.0 scale. Doctor of Pharmacy grading structure is as follows:

<u>Grade</u>	<u>Quality Points</u>	<u>Percentage</u>
A	4.0	90 – 100
B	3.0	80 – less than 90
C	2.0	70 – less than 80
D	1.0	65 – less than 70
F	0.0	less than 65

For letter grade determination, the final percentage earned in the class will be rounded to the nearest whole number. Cumulative GPA will be based upon the grades earned during the 1st, 2nd and 3rd professional years only.

Pass–Fail Grading: \*P or F

P	Pass (does not affect the GPA)
F	Fail (does not affect the GPA; however, it is counted as an “F” for the purpose of academic progression)
I	Incomplete: An incomplete grade must be requested by the student in writing, in advance of the end of the course. If the instructor approves the request, a written agreement is made regarding the work required and the due date. The new grade must be sent to the registrar within six weeks of the last class.

\*The Pass–Fail grading policy is only applicable to those courses that are graded on the pass or fail basis. It does not apply to those courses that are graded on the letter grading scale.

W*	Withdrawal before the midpoint or midterm of a course: Once a student has taken the midterm or reached midpoint, he/she is not eligible to withdraw unless there are extenuating circumstances and the student is granted permission (does not affect the GPA)
WP	Withdrawal after the midpoint of a course while passing (does not affect the GPA)
WF	Withdrawal after the midpoint of a course while failing or unauthorized Withdrawal

\*Due to the sequential nature of the PharmD curriculum, withdrawal from any single course will not be permitted and students must withdraw from all courses in that semester. To guarantee readmission the following year, students would need to obtain an approved leave of absence. Poor academic performance as outlined in the School of Pharmacy Student Handbook is not seen as rationale for an approved leave of absence. It is strongly advised for any student considering withdrawing to consult with the Associate Dean for Academics and Assessment for more details.

For letter grade determination, the overall class percentage of earned points will be rounded to the nearest whole number. Cumulative GPA will be based upon grades earned during the first, second, and third professional years only.

### Graduate and PsyD Programs

Graduate and PsyD programs grade point average is based on a 4.0 scale. Graduate and Doctoral programs grading structure is as follows:

<u>Grade</u>	<u>Quality Points</u>	<u>Percentage</u>	
A	4.00	95 – 100	Superior level of competency
A-	3.67	90 – 94	
B+	3.33	85 – 89	
B	3.00	80 – 84	Satisfactory level of competency
B-	2.67	77 – 79	
C+	2.33	74 – 76	Marginal level of competency
C	2.00	70 – 73	Marginal level of competency
F/WF	0.00	0 – 69	Failure to demonstrate a marginal level of competency; “F” does not count towards the total number required for the program.

HP	Superior level of competency in practicum seminar
P	Satisfactory or marginal level of competency in practicum seminar
S	Satisfactory level of progress in dissertation seminar or biomedical research
U	Unsatisfactory level of progress in dissertation seminar or biomedical research
I	Incomplete: An incomplete grade must be requested by the student in writing, in advance of the end of the course. If the instructor approves

the student's request, a written agreement is made regarding the work required and the due date. The new grade must be sent to the registrar within six weeks of the last class. The only exception is for an Independent Study. Students must satisfy incompletes for Assessment I or II or Research I before the end of late registration for Assessment III or Research II to be eligible for enrollment in these courses

- W Withdrawal before the midpoint or midterm of a course; once a student has taken the midterm or reached midpoint, he/she is not eligible to withdraw unless there are extenuating circumstances and the student is granted permission
- WP Withdrawal after the midpoint of a course while passing
- WF Withdrawal after the midpoint of a course while failing or unauthorized withdrawal
- AU Audited (no course credit)

### **Grade Point Average**

The grade point average is calculated by dividing the total credits attempted (excluding grades of HP, S, P, WP, I, AU, W) into the sum of the products of points and credits for all courses taken. Only courses taken at PCOM are included in this calculation.

### **Grade Reports**

Grades are available to all students at the end of each term via the Banner Web services in Nucleus. PCOM does not distribute paper mailers.

### **Dropping of Courses**

The deadline to drop a course is the last day of the first week of the term. Students who drop a course by this deadline will receive a 100% tuition refund.

The Doctor of Osteopathic Medicine, the Doctor of Pharmacy and the Physician Assistant programs are lockstep programs. Students enrolled in these programs cannot request to be dropped from just one class. Dropping one course will require a complete drop for the term. Students are required to take all courses specific to their year. It is required that if circumstances warrant a drop from the term, the student must consult with the dean for approval.

It is also recommended that graduate program students consult with their program director prior to dropping a course.

### **Withdrawal from Courses**

Students in the Doctor of Osteopathic Medicine, the Doctor of Pharmacy and the Physician Assistant programs may not withdraw from a single class. Students in these programs must withdraw from courses in that term. Due to the sequential nature of the courses students may be required to take a leave of absence until the following year to continue in their program.

Students in graduate and PsyD programs may request a withdrawal from a course up to the midpoint of a course and will earn a grade notation of Withdraw (W). After the midterm or the midpoint of the course, students will not be eligible to withdraw from a course unless there are extenuating circumstances and they are given permission from the program director. The latter option will be reserved for extreme circumstances only. In the case of such course withdrawals approved after the midpoint of the course, a grade notation of WP or WF will be made by the course director, depending on the student's status in the course to that date. Students may not continue in the program with more than one WF grade notation. Withdrawal grades or credits are not calculated in the grade point average.

### **Auditing Courses**

For a student to audit a course, he/she must receive permission from the dean. An audit of a course does not provide the student with any course credit.

### **Veteran Information**

Contact with the Veterans Administration and negotiation of problems related to veterans benefits are handled in the Registrar's Office. Application for benefits at PCOM is generally initiated by filing a "Change of Place of Training" form upon leaving the undergraduate institution in which the student is enrolled prior to PCOM, or upon separation from the Armed Forces.

### **International Students Information**

International students' paperwork is processed through the Registrar's Office. PCOM has been approved to process F-1 Visas. Prior to the start of their first term, international students must submit a Financial Responsibility form to the Registrar's Office.

### **Transfer Credit**

The Doctor of Osteopathic Medicine program does not routinely accept transfer students; however, transfer application may be considered under extenuating circumstances and depending on placement available in the class. Consideration will be given only to a student who is in good standing at an AOA accredited college of osteopathic medicine. If accepted, a transfer student will be given credit for courses successfully passed at the previous college that meet PCOM's curriculum requirements. A minimum of two years must be completed at PCOM for a student to be eligible to receive the DO degree. For further information see Admissions policy on DO transfer students.

PCOM School of Pharmacy does not routinely accept transfer students; however, a transfer application may be considered under extenuating circumstances and depending on places available in the class. Consideration will be given only to a student who is in good standing at an ACPE-accredited college or school of pharmacy who is eligible for re-admission to the previously attended college or school. The initial request for transfer must originate from the dean of the college or school of pharmacy from which the student wishes to transfer and must be

directed to the dean of the PCOM School of Pharmacy – Georgia Campus. Application materials must be submitted and a formal interview with the Admissions Committee will be required. If accepted, a transfer student will be given credit for courses successfully passed at the previous college that meet PCOM's curriculum requirements. A minimum of two years must be completed at PCOM for a student to be eligible to receive the PharmD degree.

Graduate programs may permit transfer credits provided the student meets PCOM's curriculum requirements and upon approval of the academic department. A graduate student will be given permission to transfer to PCOM no more than six graduate level credits for coursework successfully completed at a previous college.

Doctoral-level students are not permitted to transfer any prior coursework to PCOM.

### **Attendance Policy**

Students are expected to attend all classes to maximize their educational experience by participating in and following their discussions first-hand. Individual course directors may set attendance standards for their course, including the designation of mandatory lectures, and may implement in-class quizzes or record attendance. Thus, attendance may be a factor in determining the final grade in a course, at the discretion of the course director.

One-hundred percent attendance is required in clinical clerkships, remedial assignments, laboratory sessions, small-group sessions, clinical correlations and standardized patient exercises, and all introductory and advanced pharmacy practical experiences.

Serious excuses for missed attendance, which must be documented, should be reported to the assistant dean of student affairs for first and second year DO students or to clinical education for third and fourth year DO students, who in turn will advise the course or clerkship director for his or her consideration. Students in other degree programs should report and document their absence to the head of their program. Final determination to accept an excuse remains with the course or clerkship director.

Extended absences for illness, family emergencies, etc., must always be documented by the assistant dean of student affairs, clinical education, or the office of the specific academic program.

### **Satisfactory Academic Progress**

Student scholastic achievement is reviewed on an ongoing basis by the Faculty Committee on Academic Policy and Promotion.

In the Doctor of Osteopathic medicine program, the committee determines the extent of a student's academic deficiency by considering the accumulation of academic standing units. Each course block or clinical clerkship is equal to one

academic standing unit. Eligibility for promotion to the next class is determined at the end of each academic year; however, students with unsatisfactory academic performance may be counseled to withdraw from the program prior to the end of the academic year.

A student with a failure in one academic standing unit will be recommended by the Faculty Committee on Academic Policy and Promotion to the dean for promotion from one class to the next when the student has removed the single deficiency through remedial examination. A student with course failures in excess of one academic standing unit is not eligible for remedial examination and is not eligible for advancement to the next year of study. A student with course failures in excess of one academic standing unit in any academic year may be dismissed from the academic program of the College or required to repeat a year of study, at the discretion of the Faculty Committee on Academic Policy and Promotion.

In the Doctor of Pharmacy program, a student must receive a minimum cumulative grade point average of 2.0 to graduate. The minimum grade required to pass pharmacy coursework is a "D."

The School of Pharmacy Academic Performance and Standards Committee reviews all student academic progression. When a student violates the progression guidelines, the Academic Performance and Standards Committee evaluates the case and submits a recommendation letter to the Faculty Committee on Academic Policy and Promotion. This Committee reviews the case and reports its decision to the School of Pharmacy dean, who generates the appropriate decision letter.

The committee determines the extent of academic deficiency by considering specific academic guidelines. Numerous parameters exist which help to maintain proper alignment of academic expectations while describing consequences of failure to achieve these requirements. The progression guidelines also define academic probation, dismissal criteria and steps which must be undertaken to graduate from the pharmacy program.

A student in the Doctor of Pharmacy program who has failed a course must remediate the class during the following summer. The grade earned through remediation will be averaged with the original "F" for calculation of the final GPA. Only one course may be remediated. Students may not progress to the next academic year until remediated course work is successfully completed. For purposes of this policy, an "F" in a pass-fail course is treated as an "F" with regard to overall academic progression and thus must be repeated.

Dismissal from the Doctor of Pharmacy program occurs if a student receives:

1. Five grades less than "C" for all coursework including experiential education during the pharmacy program or
2. Three grades of "F" for all coursework including experiential education during their academic career or

3. Fail the same course twice including all remediated coursework or
4. If a student's semester or cumulative GPA remains below 2.0 at the end of the probationary semester or

If a student earns two grades of "F" (including "WF") during a single professional year, he/she will be reviewed by the Academic Performance and Standards Committee for an assessment of options which includes re-taking the entire year or dismissal from the pharmacy program.

### **Academic Probation**

Students are placed on academic probation under two circumstances: (1) their semester or cumulative GPA is less than 2.0 at the end of any semester, or 2) they receive a course grade of F or WF in any professional year. The duration of the probationary period and requirements for removal from probation differs between the two circumstances.

### **Academic Probation When the Semester or Cumulative GPA Is Less than 2.0**

If a student is placed on academic probation as a result of their semester or cumulative GPA dropping below 2.0, then the probationary period is the following semester. At the end of the probationary period, the student must have a semester and cumulative GPA of 2.0 or better.

Failure to do so will result in the student being reviewed by the School of Pharmacy Academic Performance and Standards Committee for consideration of the following options, including but not limited to (1) recommendation for dismissal from the program, (2) repeat of the current professional year.

The minimum GPA required to graduate from PCOM is 2.0; therefore, if the cumulative GPA is less than 2.0 at the end of the third professional year the student will not be allowed to progress into the fourth professional year. The student will be reviewed by the School of Pharmacy Academic Performance and Standards Committee for consideration of the following options, including but not limited to (1) recommendation for dismissal from the program, (2) repeat of the third professional year. If the Committee allows a repeat of the third academic year and the cumulative GPA remains below 2.0, the student will be dismissed from the program.

### **Academic Probation With a Course Grade of F or WF**

A student who receives a single course grade of F or WF with a cumulative GPA less than 2.0 is placed on probation until the course is successfully remediated. Failure to successfully remediate the course results in dismissal from the program.

Failed Experiential Rotations must be repeated at a date and time as determined at the discretion of the Director of Experiential Education. If a student receives two course grades of F or WF within any professional year, then the student is referred to the School of Pharmacy Academic Performance and Standards

Committee for consideration of the following options, including but not limited to (1) recommendation for dismissal from the program, (2) repeat the professional year or (3) remediation.

If a student is allowed by the School of Pharmacy Academic Performance and Standards Committee to repeat the professional year (as determined by the curriculum) then the probationary period is their repeat year. The student is removed from probation after successful completion of the probationary year.

Any student on probation for two or more of the previously stated reasons will automatically be referred to the School of Pharmacy Academic Performance and Standards Committee for review for consideration of the following options, including but not limited to (1) recommendation for dismissal, (2) repeat of the professional year.

Successful removal from academic probation is achieved when the semester and cumulative GPA is  $\geq 2.0$  at the end of the probationary semester. The student also is removed from academic probation during a repeated year when his/her semester and cumulative GPA  $\geq 2.0$ .

In the graduate programs, a grade of F (failure) in any graduate course will make the student liable for dismissal from the program. A minimum cumulative grade point average of 3.0 is required for continuation to unconditional degree candidacy status, and conferral of the master of science degree.

Doctoral students must achieve a “B” average (3.0) or higher to take comprehensive exams and to graduate from the program. PsyD students may earn no more than two grades below a “B-” or more than one “F” in any course, required or elective. In addition, students must record a “B-” or better in all required courses.

Each degree program also has specific requirements regarding comprehensive examinations, licensure exam passage, practicum, internship, thesis and dissertation completion. These policies are explained in detail in the student handbook for the respective program.

### **Categories of Academic Standing**

The categories of academic standing are as follows:

*Good Standing:* Status of a student who has met course requirements in a satisfactory manner and has demonstrated professional behavior.

*Probation:* Status of a student who has demonstrated a marginal level of performance to the degree that any additional course deficiencies will make the student liable for dismissal according to College policy.

*Dismissal:* Action, after review of the academic deficiency or deficiencies of a student by the Faculty Committee on Academic Policy and Promotion, whereby



a student may be dismissed from the academic program of the College.

### **Academic Appeal**

A student who is dismissed for academic deficiency may appeal the decision. Such a request or appeal must be made to the Office of Academic Affairs within fifteen business days after the student has been notified of the decision to dismiss.

Students may not bring before the Faculty Committee on Academic Appeals requests other than an appeal of a permanent dismissal action. Any student appealing a dismissal will be entitled to a hearing before the Faculty Committee on Academic Appeals. The scope of the review shall not include a review of the components of a specific grade or grades.

At the hearing, the student may present evidence on his or her behalf, and/or choose to be represented by an advisor or an attorney. The student must also provide a list of any witnesses he or she plans to call on his or her behalf and/or the use of an attorney or other advisor at least ten days prior to the hearing. The student shall be given written notification of the final decision.

### **Change of Enrollment Status**

*Leave of Absence:* A leave of absence is defined as a pre-approved leave from the institution that suspends a student's course of academic and/or clinical study or off-site training for a definite period of time, not to exceed 12 months.

A leave of absence may be granted for one of the following reasons: (1) a medical or family emergency; (2) a financial emergency; (3) pursuit of an academic endeavor other than the regular classroom work or training assignment, either on campus or at another recognized teaching facility; (4) active military service.

Only the senior vice president for academic affairs can grant a leave of absence. To receive consideration for a leave of absence, a student must submit to the dean a written request explaining the time requested and the basis for the leave of absence. The student, in consultation with the senior vice president for academic affairs, should consider how a leave would affect his or her overall progress in the academic program of the College. The senior vice president for academic affairs reaches a decision after careful consideration is given to personal and professional circumstances. All applications for leave of absence are considered on their individual merits and approved only for extraordinary reasons.

When an approved leave or formal withdrawal is granted before the midpoint of a course, the course(s) in progress at that time will be recorded on the transcript with the grade "W"; if an approved leave is granted after the midpoint of a course, the grade recorded on the transcript will reflect the grade status at that part of the term ("WP" if passing; "WF" if failing). Students who permanently withdraw from the academic program of the College without following the

withdrawal procedure will receive the grade “F” for courses in progress. In the case of courses repeated in their entirety, the new grade earned will be recorded in the term the repeated course is completed. This new grade will be calculated in the grade point average, however, this will not remove the previous “W”, “WP”, or “F” for that course from the transcript.

Before the conclusion of the leave of absence, the student must notify the dean and the registrar in writing of his or her intent to register and resume his or her degree program. If a leave of absence is due to personal illness, the student’s attending physician or other health care provider as specified by the senior vice president for academic affairs must supply a letter attesting to the student’s ability to continue in the academic or clinical program, or other training activity. The student’s course of study will then be resumed at the point in the curriculum deemed most appropriate by the dean.

A student on leave of absence is not considered enrolled during the term of the leave and does not qualify for loan deferment, special monetary loans, grants or other special considerations that presuppose the status of a regular student. As such, students are advised to consult with the Financial Aid Office regarding their loan payback and other financial matters throughout their decision process.

Health insurance may be continued if premiums are paid on time. Special arrangements must be made with Financial Operations for regular payment of premium, which is generally monthly during a leave.

A student on a leave of absence who fails to return within the time period specified in the approved leave of absence will be dropped as a student from the College. Any student who is dropped must reapply for admission.

A student on financial leave must satisfy his or her account with the bursar as stipulated in Payment of Tuition and Fees section before petitioning for readmission. Notwithstanding time off for leave(s), all requirements for graduation from PCOM must be completed within seven years from the first date of matriculation in the medical and doctoral programs, or within three years for the master’s programs.

*Transferring from PCOM:* If a student in the DO program or in any other degree program desires to transfer to any other institution, the initial contact should be made with the senior vice president for academic affairs in order to obtain a letter of good standing, if required.

Transcripts may be requested from the registrar and will be released only if the financial account is in good order.

### **College Disciplinary Policy and Procedure**

It is not possible to enumerate all forms of behavior both within and outside the College premises and property that would raise serious questions concerning an

individual student's continuing in study at the College and/or in such student's ability to practice as a professional after graduation, and which would constitute a violation of professional behavior. The following, however, are some examples of behavior that would be unacceptable: violation of any law of the land; dishonesty, such as cheating, or knowingly furnishing false information to the College; breaches of confidentiality in the course of patient care; drug or alcohol abuse; forgery, alteration or misuse of College or training site documents, records or identification; abuse, malicious misuse, damage or destruction of College or training site property; assault or battery, threat of force or violence or any other action or omission that would jeopardize the health or welfare of any member of the College or personnel at a training site, including, without limitation, members of the faculty, administrative or professional staff, students, employees, patients or visitors; abusive or disrespectful conduct towards members of the faculty, administration or professional staff, employees, students, patients or visitors to PCOM; theft of or damage to any property temporarily or permanently located on the College or training premises; obstruction or disruption of teaching, research, patient care or any other College or training activities; unauthorized entry into, occupation of or obstruction of any building or part thereof on the College premises; violation of any other duly established rules and regulations of the College, affiliated hospitals or any affiliated institution. As used in the above examples, the College premises and College property shall include the premises and property of any affiliated institutions or training sites where PCOM students pursue activities for academic credit. Also included is conduct related to participation in any activities under the auspices of the College or its student organizations.

*Forms of Discipline:* Breaches of appropriate professional behavior and violations of College policy will be subject to discipline. Discipline includes, but is not limited to, reprimand, probation, suspension and dismissal.

*Reprimand:* A written admonition to a student for inappropriate behavior that is found to have constituted a relatively minor offense. It may be issued by an administrator or by any member of the faculty of the College. Reprimands are reported to the senior vice president for academic affairs and the assistant dean for student affairs for informational purposes.

*Probation:* A student may be placed on disciplinary probation for not longer than one academic year. The provisions of this probation will be decided by the Faculty Committee on Discipline. Such provisions may include a requirement that the student obtain medical and/or psychiatric consultation and treatment or other terms designed to remedy the behavior being reviewed and to prevent its recurrence.

*Suspension:* Represents temporary separation from the College. The duration of a suspension shall be determined by the Faculty Committee on Discipline, but shall not exceed one academic year. The Committee may also place conditions on the student's return to the College. Such conditions may include the student's

need to obtain medical and/or psychiatric consultation and treatment, or other appropriate conditions.

*Dismissal*: Represents permanent separation from the College. Dismissal may be invoked by the Faculty Committee on Discipline and may be imposed with or without the right to reapply for admission to the College at a later date.

Where medical or psychiatric consultation and treatment are recommended or required, the confidentiality of the physician/patient relationship shall be preserved and no report shall be made by the consulting physician to the Faculty Committee on Discipline without the consent of the affected student. However, the Faculty Committee on Discipline may condition a student's ability to continue as a PCOM student upon a satisfactory evaluation by a physician, psychiatrist, or psychologist appointed by the committee.

The process and proceedings are described in the general student handbook.

## TUITION AND FEES

The Board of Trustees established the following tuition for the 2010-2011 academic year. Tuition is payable 20 business days before the start of each term. Tuition and fees are subject to change at any time at the discretion of the Board of Trustees. Fees are neither returnable nor transferable. Each DO, Pharmacy and PA student is charged an annual comprehensive fee of \$500 and a \$100 student health fee, and each graduate student is charged a per term comprehensive fee of \$125 and an annual student health fee of \$100.

It is the policy of PCOM that all students that graduate are charged a graduation fee. Graduation fees will be charged at the rate set by the PCOM Board of Trustees and subsequently published in the Bursar's Tuition and Fees Schedule. The fee is required of all graduates whether they plan to participate in the graduation exercise or not. Graduation fees will be charged at the following times:

- DO and Pharmacy students will be charged the summer term of their graduating year.
- PA students will be charged the summer term of their second year.
- Biomed students will be charged the fall term of their second year.
- Forensic Medicine students will be charged the fall term of their second year.
- ODL students will be charged when registering for the Capstone course.
- MS School Psychology students will be charged in the summer term prior to graduation.
- MS Clinical Psychology students will be charged in the fall term of their second year.
- EdS students will be charged in the fall term of their third year.
- PsyD School students will be charged in the fall term of their fifth year.
- PsyD Clinical students will be charged in the fall term of their fifth year.

The act of charging a graduation fee does not ensure that a student will actually graduate. Fees paid are applicable towards graduation in the next academic year if a student fails to meet graduation requirements in the present academic year. The graduation fee will be reversed for those students who do not subsequently graduate from PCOM. Health insurance rates are the same for all students and are available from the Bursar's Office.

### **Doctor of Osteopathic Medicine (DO)**

Tuition for the 2010-2011 academic year is \$39,432. Students are charged the comprehensive fee and student health fee as described above.

Accepted applicants are asked to send a \$250 non-refundable tuition prepayment according to the schedule listed in the Admissions Decision section of this catalog. An additional deposit of \$2,000 is required on April 15 from all confirmed students. This fee is non-refundable and, along with the initial \$250 deposit, will be credited to the student's tuition account.

### **Doctor of Pharmacy (PharmD)**

Tuition for the 2010-2011 academic year is \$29,990. Students are charged the comprehensive fee as described above.

Upon notification of acceptance as a student, an advance payment of \$500 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Doctoral Program in Clinical Psychology and School Psychology (PsyD)**

Tuition for the 2010-2011 academic year is \$952 per credit. Students are charged the comprehensive fee as described above.

Upon notification of acceptance as a student, an advance payment of \$500 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Master's Degree Program in Counseling and Clinical Health Psychology (MS), School Psychology and CAGS**

Tuition for the 2010-2011 academic year is \$690 per credit for all master's of psychology students. Students are charged the comprehensive fee as described above.

Upon notification of acceptance as a student, an advance payment of \$500 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Educational Specialist Degree – Psychology (EdS)**

Tuition for the 2010-2011 academic year is \$746 per credit. Students are charged the comprehensive fee as described above.

Upon notification of acceptance as a student, an advance payment of \$500 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Master's Degree Program in Organizational Development and Leadership (MS) and Certificate Program**

Tuition for the 2010-2011 academic year is \$682 per credit. Students are charged the comprehensive fee as described above.

Upon notification of acceptance as a student, an advance payment of \$150 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Graduate Program in Biomedical Sciences (Certificate and MS)**

Tuition for the 2010-2011 academic year is \$726 per credit. Students are charged the comprehensive fee and student health fee as described above.

Upon notification of acceptance as a student, an advance payment of \$500 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Master's Degree Program in Health Sciences (Physician Assistant) (MS)**

Tuition for the 2010-2011 academic year is \$29,040. Students are charged the comprehensive fee and student health fee as described above.

Upon notification of acceptance as a student, an advance payment of \$500 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Master's Degree Program in Forensic Medicine (MS) and Pathway Program**

Tuition for the 2010-2011 academic year is \$713 per credit for all forensic medicine students. Students are charged the comprehensive fee as described above.

Upon notification of acceptance as a student, an advance payment of \$150 is required to reserve a place in the first year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal.

### **Late Payment**

It is the policy of the College that the payment of tuition and fees is due in full at each billing cycle as published in the College calendar. All students who expect to take out loans to meet their obligations must show proof of pending loans sufficient to meet the payment of tuition and fees on the due date.

If tuition is not paid in full on that day, or if proof of adequate pending loans is not furnished, a late fee of \$100 per month will be assessed on the outstanding balance until such time as all obligations are met. A check that is not honored by the bank on which it was drawn will be subject to a \$50 fee.

Students with outstanding balances from previous terms will not be permitted to

register for the next term until all financial obligations are met either by payment in full or by proof of adequate pending loans. If a student is unable to meet his or her outstanding balances, the student will be granted an administrative leave of absence to rectify his or her credit situation.

All prior year balances must be satisfied before a student is permitted to start a new academic year. Balances remaining unpaid at the end of the fourth year or end of degree program will prevent a student from receiving his or her diploma.

In the event that a student receives and accepts a late admission to the first year of study, an exception to the above policy will be considered if the appropriate loan applications are filed immediately with the expectation of making full tuition payment by the end of the first term. This exception is for the first term of the first year only. Any other exceptions to this policy must be discussed with the director of financial operations.

### **Tuition Refund Policy**

In case of total withdrawal from a semester, tuition charges will be adjusted according to the institution's tuition refund policy.

If a student withdraws from classes within seven weeks from the start of the term, a pro-rata refund or tuition credit may be authorized. In the case of full withdrawals, the effective date of withdrawal is the date on which the student filed with the dean a written notification of withdrawal or a request for a leave of absence. For courses not conducted on a weekly schedule, summer sessions, and clinical clerkships/preceptorships in the medical and physician assistant programs, the refund is prorated according to the percent of the clerkship, preceptorship or course completed as indicated in parentheses below:

<u>Withdrawal During:</u>	<u>Term Charge</u>	<u>Refund or Credit</u>
<b>First week of class</b> (up to five percent of instructional time)	0%	100%
<b>Second week of class</b> (more than five percent but no more than 10 percent of instructional time)	10%	90%
<b>Third and fourth weeks of class</b> (more than 10 percent but no more than 25 percent of instructional time)	25%	75%
<b>Fifth through seventh weeks of class</b> (more than 25 percent but no more than 50 percent of instructional time)	50%	50%
<b>After seventh week of class</b> (more than 50 percent of instructional time)	100%	0%

Exceptions to this refund policy may be made in certain unusual situations



permitting PCOM to return more than the prescribed refund amount. Examples of such situations may include, but are not limited to: academic dismissal where the student was allowed to continue into the next term before a determination about academic status could be made, serious illness, injury obtained while at a clinical rotation, or being called to military service.

No fee or portion of a fee is refundable. The refund policy is subject to change at the discretion of the Board of Trustees, but in no instance will such a change become retroactive.

All federal financial aid funds are credited or returned in compliance with the Federal Return Policy Schedule (below).

### **Financial Aid**

If the student has already received a credit disbursement of financial aid and then withdraws during the refund period, his or her eligibility must be recalculated. If the student received financial aid in excess of the student's revised eligibility, the student will be required to repay those funds to the College so that the funds can be returned to the appropriate aid programs.

The Financial Aid Office will notify the student of any adjustment to the student's financial aid award resulting from withdrawal. In addition, the Treatment of Title IV Funds Worksheet will be reviewed at the exit interview. The student may request a copy of the detailed worksheet of the distribution formula from the Financial Aid Office and should contact the Bursar's Office concerning any balance due.

Federal loans cannot be processed when a student is no longer enrolled on at least a half-time basis. Withdrawing students in receipt of federal program loan funds should contact the Financial Aid Office to schedule exit counseling upon withdrawal.

### **Return of Title IV Funds**

The Financial Aid Office is responsible for recalculating federal financial aid eligibility for students who discontinue enrollment during the term. Upon notification from the office of the Registrar that a student has withdrawn from or dropped all classes, was dismissed, or is approved for a leave of absence, the Financial Aid Office is required to calculate the percentage of the term completed if the student received or was eligible for Title IV financial aid.

If the withdrawal date indicates that the student left the institution prior to completing at least 60% of the enrollment period, the Financial Aid Office must recalculate the eligibility for Title IV funds based on the following formula required by the federal government:

1. Percentage of payment period is the number of days completed to the withdrawal date.

2. The percentage of earned aid is the percentage of the payment period completed, divided by the total number of days in the payment period or term. Breaks of five or more days are not counted as days that are part of the term.

Funds paid by federal student aid programs are returned to the appropriate program based on the percentage of unearned aid as required by the federal government: The aid to be returned is the result of the total amount of aid that could be disbursed minus the percentage of aid earned, multiplied by the total amount of aid that could have been disbursed for the payment period or term.

If a student earned less aid than the amount disbursed, the institution is required to return the unearned portion of funds to the federal program(s). As a result, the student may owe a debit balance to the institution.

The institution must return the amount of Title IV funds for which it is responsible within thirty days of the date of the determination of the student's withdrawal date. Funds are repaid in the following order in accordance with federal regulation:

- Unsubsidized Federal Stafford Loans
- Subsidized Federal Stafford Loans
- Unsubsidized Direct Stafford Loans (other than PLUS Loans)
- Subsidized Direct Stafford Loans
- Federal Perkins Loans
- Federal PLUS Loans
- Direct PLUS Loans

If a student earned more aid than was disbursed to the student account, the institution would request a post-withdrawal disbursement which must be paid within 120 days of the student's withdrawal.

## **FINANCIAL AID**

The staff of the Financial Aid Office is committed to providing guidance and information necessary to assist students in meeting their financial needs.

To apply for financial assistance at PCOM, students must complete the Free Application for Federal Student Aid (FAFSA). This form is used to apply for federal student aid, including grants, loans and federal work-study. It is also used to award need-based institutional funds as well as many private grants and scholarships.

In order to be eligible for financial aid, students must maintain at least half-time enrollment. Enrollment status is determined by the registrar based on the program.

Listed below are the financial aid programs administered by the Financial Aid Office at PCOM.

### **Loans**

#### **Federal Direct Subsidized Loans**

A subsidized loan is awarded on the basis of need. Funds are disbursed directly from the US Treasury. Payment is deferred while attending school at least half time or during post enrollment grace periods.

#### **Federal Direct Unsubsidized Loans**

An unsubsidized loan is not awarded on the basis of need. The student may pay interest or allow it to accrue while attending school. If interest accrues while the student is in school or during other periods of nonpayment, it will be capitalized – that is, added to the principal amount of the loan.

#### **Annual Direct Loan Limits**

Under the Federal Direct Loan Program, graduate students can borrow annually up to \$20,500 in combined subsidized and unsubsidized loans. Medical students enrolled in a nine-month program can borrow up to \$40,500; medical students enrolled in a 12-month program can borrow up to \$47,167 in combined loans. Subsidized Federal Direct Loans cannot exceed \$8,500 of either amount.

#### **Aggregate Direct Loan Limits**

The total debt that the student can have outstanding from all Stafford and Direct Loans combined is \$138,500 for graduate students and \$224,000 for medical students. The subsidized loans in either program cannot exceed \$65,500. Aggregate debt limits include any Stafford or Direct Loans received for undergraduate study.

## **Federal Direct Graduate PLUS Loans**

The program provides federally guaranteed loans to graduate and professional students to borrow beyond the Stafford or Direct Loan limits up to the total cost of education. Students who wish to borrow under the Direct Graduate PLUS Loan Program must obtain credit approval. Repayment may be deferred while the student-borrower is attending school on at least a half-time basis.

## **Federal Perkins Loan**

This is a federally guaranteed, low-interest, five percent loan administered by PCOM. It is available to medical and graduate students with exceptional financial need. Interest is deferred while the student is in school on at least a half-time basis and during grace periods. Repayment arrangements for the Perkins Loan are made with PCOM's Financial Operations Department.

## **Alumni Association Loan**

The Alumni Association of PCOM makes a number of low-interest loans available to third and fourth year medical students in good academic standing who demonstrate financial need. The interest rate is five percent, and repayment begins one year after graduation. Repayment can be deferred during internship and residency.

## **Primary Care Loan**

This is a low-cost federal loan program for medical students who are committed to primary care medicine and who demonstrate exceptional financial need. Priority is given to third and fourth year medical students. The Primary Care Loan amount varies depending upon the availability of funds and the financial need of the student; however, the amount does not exceed the annual cost of tuition and fees. The interest rate is five percent and does not accrue during in school or post-education grace periods. Repayment can be deferred during internship and residency, and interest does not accrue during deferment. To be considered for the Primary Care Loan, the student must include parental financial information on the Free Application for Federal Student Aid (FAFSA), submit a signed copy of his/her parents' federal tax return to the Financial Aid Office, and arrange an interview with a financial aid staff member.

## **Scholarships and Grants**

### **Institutional Need-based Grants**

Scholarship and grant funds are made possible through institutional resources including Trustee Scholarships and contributions made to the PCOM Foundation. These funds are awarded to students who demonstrate need and are restricted by the availability of funding at the time that the student completes his/her application for financial aid. A complete financial aid application includes parental data on the Free Application for Federal Student Aid (FAFSA) and submission of a signed copy of parents' federal tax return.

### **Institutional Scholarships**

The Faculty Committee on Honors and Awards administers scholarships that are based on academic excellence or other criteria specified by the donor. Candidates who meet the requirements determined by the scholarship donor are reviewed by the committee. In most cases no additional application is required.

### **PCOM Yellow Ribbon Grants**

PCOM participates in the Veteran's Administration Chapter 33 matching funds program. Students who are eligible to receive VA Chapter 33 benefits at PCOM may be considered for additional funds from PCOM toward unmet tuition up to \$4,000.

### **National Health Service Corps**

This is a competitive federal program that awards service-obligated scholarships to students pursuing primary health care training. The scholarship furnishes payment of tuition and required fees, other reasonable costs, and a monthly stipend. In return, for each year or partial year of scholarship support, the student must serve one year in a health professional shortage area. The minimum service commitment is two years.

### **Armed Forces Scholarships**

The Army, Navy and Air Force offer competitive scholarships based on academic performance and recommendations. The scholarship provides a monthly stipend, tuition, fees, books and instruments. In return for the scholarship, recipients are obligated to give one year of service for each year of support.

### **Private Resources**

Numerous private, city and state agencies sponsor scholarship and loan programs for graduate and medical students. Please refer to PCOM's "A Guide to Financing Your Education" for a description of the financial aid process and a detailed listing of federal, institutional and private sources of grants, scholarships and loans. The financial aid section of PCOM's Web site is frequently updated and contains valuable financial aid information.

### **Federal Work-Study Program**

PCOM participates in the Federal Work-Study Program (FWS). Students who are accepted for enrollment and can demonstrate financial need as determined by the Free Application for Federal Student Aid (FAFSA) "needs analysis" are eligible to participate in jobs on campus upon matriculation at the College.

Applications and information about the work study program are posted on Nucleus for both students and supervisors. The information includes a listing of approved jobs at the College, ranging from positions in the library and office work to research positions and occasionally assisting in medical offices. Job assignments depend on student experience and availability, and the needs of the

supervisors. An FWS award letter must be signed to acknowledge the award and accept the job.

The student's supervisor takes responsibility for hazardous material notification and strict compliance with OSHA regulations. As specified in the provisions of the Pennsylvania and the Georgia Unemployment Compensation Law, employment of students will not be covered by any program of unemployment compensation.

Students should contact the Office of Student Affairs with any questions related to the work study program.

## EDUCATIONAL FACILITIES AND RESOURCES

PCOM maintains its main campus in Philadelphia and a branch campus in the Atlanta, Georgia area. The professional resources of a city rich in medical history, achievements and scientific advances are only 15 minutes from the main PCOM campus on City Avenue. This is the seventh site of a college that graduated its first class of two physicians in 1900. State-of-the-art renovations to the 149,885 square-foot building were completed in August 2005. The GA-PCOM campus occupies 19 acres in Suwanee, Gwinnett County, Georgia.

### **Student Computer Services**

The PCOM network can be accessed via student-owned notebook computers from a variety of study areas across the campus using a direct connection or wireless access. Wireless access to the PCOM network is available in the cafeteria, library, all computer labs, most classrooms and study areas in both Evans Hall and Rowland Hall. All students are assigned a PCOM network account, portal account and e-mail address. PCOM's portal is named Nucleus and is PCOM's dynamic communication center. Nucleus is personalized for each user and provides personal announcements as well as a calendar function and online groups. The PCOM e-mail address enables students to send and receive electronic mail related to all PCOM activity. E-mail has its own set of credentials (username and password) that are separate from the PCOM network credentials that are used to access network and Nucleus resources. E-mail can be accessed while off-campus by using the Nucleus portal or by direct access through <https://pcommail.pcom.edu>. Students opting to use single sign-on through the Nucleus portal to their e-mail must have the same password for both their Nucleus and e-mail accounts.

### PHILADELPHIA CAMPUS FACILITIES

The City Avenue site provides a true college campus atmosphere for students, unique among urban medical colleges. All facilities are specially equipped for students with disabilities. All classrooms and study areas support wireless Internet access.

#### **Evans Hall**

Medical and graduate students receive hundreds of instructional hours in the two amphitheatres in Evans Hall that accommodate 250 and 235 students. The building was dedicated in 1973 in honor of H. Walter Evans, DO, a distinguished professor of obstetrics and gynecology. Both lecture halls have superb audiovisual capabilities, including video and computer presentation equipment, and the teaching system can link to Internet resources. Several classrooms are equipped for full two-way videoconference broadcasts.

The seven levels of Evans Hall also house the College library, Office of the Senior Vice President for Academic Affairs, Student Affairs, Admissions and Clinical Education. Faculty offices throughout the building are combined with

laboratories where faculty, graduates and students pursue instruction and research. The Anatomy Laboratory, which accommodates 250 students simultaneously in the cadaver dissection lab, is recognized as one of the most advanced teaching laboratories in the nation.

The architecture of Evans Hall incorporates the teaching of large classes with the enrichment of student-teacher relationships through the use of small classrooms. Evans Hall is equipped with varied and sophisticated instructional media, exhibit areas and electronic communications equipment. The ground level has a television studio and control booths for the production of instructional video programs. Video monitors are built into the lecture amphitheatres, laboratories and many other teaching areas in the building. The original Evans Hall architecture was enhanced with a three-story addition in 1996. It provides student lounges, study rooms, cafeteria, classrooms, faculty offices, a student computer lab and an osteopathic manipulative medicine teaching center.

### **Levin Administration Building**

This elegant stone mansion stands at the center of the 16-acre Moss estate purchased by the College in 1957. It underwent full restoration in 1997.

It now houses the Office of the President, the Office of Alumni Relations & Development and the Office of Marketing & Communications. The Levin Administration Building is named in recognition of the Levin family tradition of pursuing and maintaining the osteopathic heritage, and in honor of Abraham Levin, DO '35, Jacob M. Levin, DO '36, Samuel I. Levin, DO '35, and Joel L. Levin, DO '69.

### **Rowland Hall**

Purchased by the College in 1981, Rowland Hall has a reception area, a Barnes & Noble College Bookstore, and PCOM Printing Services located on the ground floor. Physician offices, administrative offices and academic areas are located throughout this five-level building. Many PCOM students receive clinical instruction in Rowland Hall's outpatient offices. A state-of-the-art computer lab with an instructor's station and 15 workstations to support the teaching modalities is located on the fourth floor.

Named in honor of Thomas M. Rowland Jr., a former PCOM president who devoted 34 years of leadership to the College, the building is home to the Psychology Department, Department of Physician Assistant Studies and the Robert Berger, DO, Clinical Learning and Assessment Center. Also housed in Rowland Hall are the following College support services departments:

Bursar's Office  
Financial Administration  
Financial Aid  
Graduate Medical Education  
Human Resources



MIS and Telecommunications  
Plant Operations  
Purchasing  
Registrar's Office  
Risk Management  
Safety and Security

### **Activities Center**

PCOM's Activities Center is a 55,000-square-foot facility available to PCOM students, student spouses and employees. There is no fee for students or PCOM employees. The center includes student lounges and recreation areas, exercise equipment, basketball and racquetball courts, and a rooftop deck suitable for hockey, basketball and shuffleboard. Group exercise classes, including Pilates, yoga, spin and aerobics, are offered throughout the year. The center also includes an NBA regulation-size basketball court that the Philadelphia 76ers share for part of the year as a practice facility. Administrative offices for Sixers staff and a media room are also included as part of the cooperative relationship between the College and the basketball team.

### **Healthcare Centers**

The rural and urban Healthcare Centers sponsored by PCOM offer unique learning opportunities for fourth year osteopathic medical students. At the centers, students learn under direct supervision of attending physicians and become intimately involved in the care of patients. The centers provide cross-cultural experiences in underserved, poor, working-class and racially diverse communities. The Healthcare Center experience also enables students to learn the sociology and economics of the health care system by dealing with diverse populations covered by private insurance, HMOs and government medical assistance. The centers are:

PCOM Healthcare Center – City Avenue Division  
Harry Morris, DO, Director

PCOM Healthcare Center – Lancaster Avenue Division  
Marta Motel, DO, Director

PCOM Healthcare Center – Cambria Division  
Barbara Williams-Page, DO, Director

PCOM Healthcare Center – Roxborough Division  
David Kuo, DO, Director

PCOM Sullivan County Medical Center  
David Wood, DO, Director

In addition to learning at the College-sponsored Healthcare Centers, PCOM students receive clinical instruction at nine affiliated urban sites and twelve

affiliated rural community health care centers.

### **Affiliated Hospitals**

PCOM utilizes an extensive network of affiliated hospitals to ensure a high standard of education in the clinical education of PCOM's students. Clinical education programs at PCOM affiliates are guided by common educational goals. The director of clinical education monitors educational activities at the affiliated hospitals. Major teaching affiliates include:

Abington Memorial Hospital  
Altoona Hospital  
Aria Health  
Atlantic Regional Medical Center  
BayHealth Medical Center  
Chestnut Hill Hospital  
Christiana Health Center  
Clarion Hospital  
Community Medical Center  
Conemaugh Memorial Hospital  
Crozer Chester Hospital  
Crozer-Keystone Health System  
Deborah Heart and Lung Hospital  
Doylestown Hospital  
Easton Hospital  
Einstein Northern Division  
Franklin Square Hospital Center  
Geisinger Medical Center  
Heart of Lancaster Hospital  
Jersey Shore University Medical Center  
Kent General Hospital  
Lankenau Hospital  
Latrobe Hospital  
Lehigh Valley Hospital  
Lewistown Hospital  
Meadville Medical Center  
Medical Center of Beaver  
Memorial Hospital  
Mercy Catholic Medical Center  
Mercy – Scranton Hospital  
Mercy Suburban Hospital  
Montgomery County Emergency Services  
Muhlenberg Hospital  
Pennsylvania Hospital  
Phoenixville Hospital  
Pinnacle Health System  
Reading Hospital  
Roxborough Memorial Hospital

Sacred Heart Hospital  
St. Barnabas Hospital  
St. Francis Hospital  
St. Joseph's Hospital  
St. Joseph Medical Center  
St. Luke Hospital – Allentown  
St. Luke Hospital – Bethlehem  
St. Luke Hospital – Quakertown  
St. Luke Minors Memorial Hospital  
Soldiers & Sailors Hospital  
Trenton Psychiatric Hospital  
Trinitas Hospital  
UMDNJ – School of Osteopathic Medicine  
Union Memorial Hospital  
UPMC – Horizon System  
UPMC – Mercy Hospital  
UPMC – Shadyside Hospital  
Virtua Memorial Hospital  
Warren Hospital  
Williamsport Hospital  
Wyoming Valley Health System

### **O.J. Snyder Memorial Library**

The O. J. Snyder Memorial Library provides information resources to support the educational, research and clinical activities of the College. The library utilizes information technologies to expand the scope of local collections to include electronic resources, and to extend access to users at remote locations.

The electronic environment of the PCOM Digital Library includes bibliographic databases and indexes, textbooks, full-text research and clinical journals, catalogs of local, regional and national biomedical collections, and the ever-expanding web of biomedical sites.

The mission of the library is to provide users with access to the widest possible range of information resources and to assist users in acquiring the skills necessary to use these resources effectively.

The library is located on the first and second floors of Evans Hall. It houses the print collections, a reading room for the current journal collection, a conference/group study room, audiovisual room, database center and study space. The database center on the second floor houses over 20 computers and networked printers.

### **Collections**

The PCOM Digital Library provides access to a robust collection of electronic resources including over 6,000 full-text journals, hundreds of e-textbooks, numerous databases, and programs such as clinical simulations and diagnostic

decision support programs. Specialized educational resources include streaming videos of Acland's Human Anatomy and Bates Physical Examination tapes, and 3D products like An@tomy.TV and Simbryo embryology simulations.

PCOM has invested in powerful finding tools to facilitate access to e-journal titles. Journal Search is a database of all electronic titles that provides holdings information and direct links to individual titles within collections. LinkSource is an external link resolver that is imbedded within PCOM's licensed databases and links across collections (e.g., LinkSource creates a link from a citation in OVID MEDLINE to the full-text article in any of PCOM's licensed journal collections). OneSearch is a federated search engine which simultaneously searches multiple resources.

The library provides access to many licensed databases: including MEDLINE, MD Consult, Best Evidence, Cochrane Collection of Systematic Reviews, Health & Psychological Instruments, HealthStar and PsycINFO. The Digital Library also facilitates access to unrestricted Internet resources. All electronic resources are available both on campus and from remote locations.

### **Services**

The library staff provides instruction, reference, collection development and interlibrary loan services. Recommendations for purchase and requests for services may be transmitted electronically using the forms on the Services and Request Forms Web page. Staff may also be contacted by e-mail at [library@pcom.edu](mailto:library@pcom.edu).

### **Consortia Memberships**

PCOM is a member of the Tri-State College Libraries Cooperative. TCLC consists of 36 academic and special libraries located in Pennsylvania, New Jersey and Delaware. PCOM faculty and students are permitted borrowing privileges at TCLC libraries by presenting a letter of introduction authorized by a PCOM librarian. Please consult the Digital Library information page for a listing of members.

PCOM participates in the Pennsylvania Academic Library Consortium Inc. (PALCI) Web gateway, E-ZBorrow, which allows simultaneous searching of academic library catalogs in Pennsylvania. PCOM library users can directly initiate requests for most items found in PALCI using the LIB# on the PCOM ID card.

The library also participates in the National Network of Libraries of Medicine.

### **Student Computer Services**

An open-access student computer lab is located adjacent to the Evans Hall student lounge area with more than 50 workstations and printers. There are an additional 20 workstations and a printer in the library database room on the second floor of the library. Rowland Hall has a computer lab with an instructor's station and 17 workstations located in room 425. Students can access all computer labs with their PCOM ID card. All computers are attached to a Gigabit

network. Wireless access to PCOM's network is available in both Evans Hall and Rowland Hall. Wireless printing is available on the first and second floors of Evans Hall. In addition to common application programs such as Microsoft Office Suite, the software collection includes SPSS, computer-based tutorials in basic science and clinical subjects, including patient case simulations. Students may also access the Internet via the workstations in the computer lab. MEDLINE searches and searches of the shared library system of the Pennsylvania medical schools can be conducted from PC workstations in the computer labs and library.

### **GEORGIA CAMPUS FACILITY**

GA-PCOM facility is a campus designed with student learning, cutting-edge instructional technology and social interaction in the forefront. The GA-PCOM campus occupies 19 acres in Gwinnett County, Georgia. Renovations to the 149,885 square-foot building were completed in 2005. The facility design includes two architectural main focal points taking advantage of natural light through the use of skylights and partitions.

In addition to large and small classrooms, conference areas and study spaces, instructional space includes a large anatomy laboratory, a patient simulation laboratory, a multi-use basic science laboratory and a large OMM/clinical skills teaching laboratory. Additional facility expansion completed in June 2010, features two lecture halls, teaching labs, and a large number of small group rooms to support the pharmacy curriculum.

Open circulation areas facilitate social interaction and ease of access to student services, learning resources and instructional spaces. Student facilities also include a central dining hall, student lounge and fitness facility. A central feature of the GA-PCOM campus is the Information Commons, where students have access to both print and electronic media. All primary instructional classrooms at the GA-PCOM facility are wired for Internet connectivity and multi-media presentations.

#### **GA-PCOM Information Commons**

The GA-PCOM Information Commons integrates library and student computer lab functions. The Information Commons houses sufficient computers to support extensive use of the electronic resources available through the PCOM Digital Library. The Information Commons is staffed by a librarian, computer specialist, and library assistants working with the main campus library and the MIS Department.

The PCOM Digital Library provides access to a wealth of licensed Internet resources, including over 6,000 full text e-journals, electronic textbooks, bibliographic databases, streaming videos, clinical simulations, diagnostic decision support programs, and evidence-based clinical information systems, as well as subject access to selected Web resources. The Information Commons

houses print reserve and circulating collections. GA-PCOM print holdings are entered into a combined Digital Library Online Catalog. GA-PCOM users may submit borrowing requests electronically for books held in the Philadelphia collection. Print subscriptions to a small number of core journal titles constitute a reading room collection for the Information Commons. The main campus library electronically provides articles from any print-only titles in its collection to GA-PCOM users. All electronic resources in the Digital Library are available to GA-PCOM faculty, staff and students.

### **Affiliated Hospitals**

The Georgia Campus utilizes an extensive network of affiliated hospitals and preceptor physicians to ensure a high standard of clinical education for osteopathic medical students. Clinical education programs at GA-PCOM affiliates are guided by common goals to provide extensive clinical educational opportunities in Georgia and the surrounding southern states. Major affiliates include:

Aiken Regional Medical Center  
Albany Area Primary Healthcare Inc.  
Anderson Medical Center  
Archibold Memorial Hospital  
Atlanta Medical Center  
Baptist Health  
Barrow County Hospital  
BJC Medical  
Bleckley Memorial  
Boswell Memorial Hospital  
Brooks County Hospital  
Chestatee Regional Hospital  
Children's Healthcare-Scottish Rite Campus  
Colquitt Regional Medical Center  
Columbus Regional Medical Center  
Conway Medical Center  
Cooper Basin Medical Center  
Crisp Regional Health Services  
Darnell Army  
DeKalb Medical Center  
Doctors Hospital  
Dorminy Medical Center  
Duke University  
Dwight D. Eisenhower Army Center  
Early Memorial Hospital  
Emory Eastside Medical Center  
Fannin Regional Hospital  
Flint River Community Hospital  
Floyd Medical Center

Gordon Hospital  
Grady General Hospital  
Grandview Medical Center  
Gwinnett Medical Center  
Harbin Clinic  
Hart County Hospital  
Henry County Medical Center  
Hilton Head Regional  
Houston Medical Center/Perry Hospital  
Hughston Hospital  
Hutcheson Medical Center  
Jackson Madison General Hospital  
Jefferson Hospital  
Long Beach Medical Center  
Madigan Army Hospital  
Martin Army Hospital  
McLeod Health  
Meadows Regional Medical Center  
Medical Center of Georgia  
Medical Center of Manchester  
Memorial Healthcare System  
Mitchell County Hospital  
Montgomery Regional  
Morristown Hamblen Hospital  
Murray Medical Center  
Naval Hospital, Jacksonville, FL  
Naval Medical Center, Portsmouth, VA  
Newton Medical  
North Georgia Medical Center  
Northeast Georgia Medical Center  
Northeast Georgia Primary Care  
Northside Hospital Atlanta  
Northside Hospital Cherokee  
Northside Hospital Forsyth  
Novant Health  
Palmetto Health Council  
Parkridge Medical Center  
Phoebe Putney Memorial Hospital  
Putnam General Hospital  
Randolf Hospital  
Redmond Regional Medical Center  
Richmond Heights  
Rockdale Hospital  
Self Regional Medical Center  
Serenity Behavioral Health System  
Smith Northview Hospital  
Southeast Georgia Health Center

Spartanburg Regional Health System  
St. Francis Medical Center  
St. Joseph's Candler  
St. Joseph's Hospital  
Stephens County Hospital  
Summit Ridge Hospital  
Taylor Regional Hospital  
Tift Regional Medical Center  
Union General Hospital, Inc.  
Walton Regional Medical Center  
Washington County Regional Medical Center  
Wayne Memorial Hospital  
Wellstar Cobb Health System  
Wellstar Douglas Health System  
Wellstar Kennestone Health System  
Wellstar Paulding Health System  
Wellstar Windy Hill Health System  
West Georgia Health System  
William S. Hall Psychiatric Institute  
Winn Army Hospital



# COURSE OF MEDICAL STUDY

## Doctor of Osteopathic Medicine

### **Introduction to Osteopathic Medicine**

As a philosophy, science and art, osteopathic medicine is a total approach to health and disease. It recognizes that the neuromusculoskeletal system is of major importance to human life. The interrelationship between this and other body systems is a basic part of osteopathic philosophy. An emphasis on primary care, health maintenance, prevention of disease and attention to the neuromusculoskeletal system is key to osteopathic medical education and practice. Universally accepted today, these attributes were considered unorthodox when Dr. Andrew Taylor Still (1828-1917) objected to the crude medications of his time and sought to enhance the body's inherent healing through manipulation.

The osteopathic physician incorporates evaluation and treatment of the musculoskeletal system as a basis for an approach to health and disease, combining it with the diagnostic and therapeutic modalities used by general scientific approaches to the healing arts. Like their MD counterparts, DOs must be licensed in the states where they practice, and additional board certification in specialties further underscores their professional credentials. All 50 states and the District of Columbia provide for the unlimited practice of medicine and surgery by osteopathic physicians. Licensing boards are usually composed of senior members of the osteopathic profession. In some states, MDs and DOs participate in combined licensing boards.

### **Osteopathic Philosophy**

The basic premises accepted by this profession provide the osteopathic physician with a unique way of looking at health and disease. These premises include the following:

- The human body is a unit in which structure and function are reciprocally interdependent.
- The body, through a complex system, tends to be self-regulating and self-healing.
- The adequate function of body systems depends on the unimpeded flow of blood and nerve impulses.
- The musculoskeletal system is a major body system and its importance exceeds that of mere framework and support.
- There are musculoskeletal components to disease that are not only manifestations of the disease, but also important contributing and maintaining factors.

The adoption of these basic premises led to the development of the osteopathic total-body concept. The patient is considered ecologically rather than as an isolated unit. Instead of emphasizing the momentary disease state, the osteopathic approach studies and treats the person's well-being, lifestyle and behavior as a whole.

Through the American Osteopathic Association (AOA), the profession maintains its independence and its own medical schools while cooperating with other branches of medical science. Primary care is emphasized in the educational programs, and a majority of graduates enter primary care fields. However, DOs participate in all specialty and subspecialty areas of current medical practice.

### **Educational Goals**

A fundamental educational goal of the College is to prepare students for excellence in the practice of osteopathic medicine. The course of medical study is a practitioner's program with a strong emphasis on primary care, prevention and osteopathic concepts.

Each osteopathic medical student progresses through a uniform and comprehensive curriculum designed to achieve this goal. Elective clinical clerkships expose students to specialty or subspecialty fields during training, and later they may specialize. At PCOM, students are trained first as family practitioners and thus build solid foundations for their careers. Throughout the curriculum, osteopathic concepts and methods are stressed.

Efficiency is also an educational goal, maximizing each student's learning by utilizing the most effective educational methodologies available. Innovations such as computerized tutorials, classroom videos and simulated patient encounters will sharpen skills as a physician. The curriculum bridges departmental divisions and joins related disciplines, such as basic sciences to surgery and internal medicine, so that students relate different perspectives to a variety of conditions taught in a common time frame.

Instruction is attuned to the changing demands in American health care. A majority of PCOM's graduates enter primary care practice, where the large majority of health problems are treated today.

The general objectives of the educational program are expressed as "core competencies," the domains of knowledge and skills in which all students must demonstrate competency to earn the degree, Doctor of Osteopathic Medicine:

1. Osteopathic principles and practice, which are established and incorporated in the development of skills.
2. Patient care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health.

3. Medical knowledge about established and evolving biomedical, clinical and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
4. Practice-based learning and improvement that involves investigation and self-evaluation of patient care, appraisal and assimilation of scientific evidence, and improvements in patient care.
5. Interpersonal and communications skills that result in effective information exchange and teaming with patients, their families and other health professionals.
6. Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
7. Systems-based practice, as manifested by actions that demonstrate an awareness of the larger context and system of health care and the ability to effectively call on system resources to provide optimal care.
8. Information literacy, as manifested by the capability to access, understand and apply biomedical information, and actions that demonstrate the skills necessary to utilize information technology tools to effectively access information from various resources and formats.

### **The Basic Sciences and Preclinical Years**

PCOM students begin preparation for the world of clinical medicine from their first day as medical students. The curriculum combines basic science and clinical course content with integrated courses such as Cellular and Molecular Basis of Medicine, as well as integrated approaches to the pharmacology, pathology, medicine and surgery related to respiratory, genitourinary, cardiovascular and gastrointestinal systems.

The first two years lay the foundation with intense concentration on the basic sciences, anatomy, biochemistry, molecular biology, neuroscience, physiology, microbiology, pathology and pharmacology, taught in integrated course units that emphasize clinical applications. PCOM also recognizes that medical practice is more than science. Coursework in ethics and patient communication helps the student relate well to patients, while content in medical law and public health prepares the student for the complex world of private practice.

The basic sciences are complemented by instruction in clinical subjects such as internal medicine, surgery, neurology, psychiatry, pediatrics, epidemiology, OB/GYN, family medicine, rehabilitation medicine, geriatrics, radiology, oncology and physical diagnosis. The principles and practice of osteopathic medicine are taught throughout the medical curriculum. All students attend small group sessions during the first and second year to develop communication

and diagnostic skills. These special instructional activities include patient observation, case conferences and basic clinical skills workshops. In addition, an active standardized patient and robotic simulation program introduces first and second year students to patient care through examinations of patient actors in a simulated practice setting, augmented by clinical exercises on high-tech human patient simulator manikins.

### **Clinical Education**

The last two years emphasize clinical training experiences. Philadelphia Campus students are assigned to clinical clerkships throughout the Commonwealth of Pennsylvania and neighboring states. This unique training network comprises 58 affiliated hospitals, five Healthcare Centers, numerous outpatient units and scores of physicians' offices. These clinical settings become teaching arms of the College; in effect, the Commonwealth is our campus. Students at the Georgia Campus are assigned to clinical clerkships throughout Georgia and the Southeast.

The program is designed to afford progressive student responsibility for all phases of patient care under the direction of experienced physicians. This includes history taking, physical examinations, daily patient rounds, lectures, conferences and case presentations. Students rotate through services in medicine, family practice, manipulative medicine, surgery, cardiology, OB/GYN, pediatrics, psychiatry, otorhinolaryngology and office-based preceptorships. On elective clerkships, students may choose to pursue special interests at other medical institutions anywhere across the nation. All students receive additional training in osteopathic manipulative medicine during the third year.

One objective of the College is to encourage graduates to practice in communities where health care services are most needed. Therefore, each student entering PCOM must be willing to accept clinical education assignments throughout the region.

Each senior student serves at least eight weeks in an under-served community clerkship. An alternative rural elective is offered to a limited number of students, whereby the student may select an area of alternative health care delivery or a rural area of intense medical need. In the past, students have chosen studies in India, Israel, Africa, Appalachia and Indian Health Service sites.

### **Requirements for Graduation**

Each candidate for the degree of Doctor of Osteopathic Medicine (DO) must be age 21 or older, be of good moral character and have passed Parts I and II of the COMLEX (National Board of Osteopathic Medical Examiners), including the Level II Physical Examination component. Each candidate must have completed satisfactorily the program of study PCOM requires for the degree within seven years from the date of initial matriculation. Attendance at the Commencement ceremonies conferring the degree is required of each candidate.

## **Requirements for Practice**

Each recipient of the DO degree must fulfill the requirements of the state licensing board of the state in which the physician chooses to practice. These requirements vary widely and are regulated by the laws of each state.

## **Predoctoral Research**

Opportunities exist for extracurricular research experience for all of PCOM's students. Research laboratories and equipment, as well as electron microscopic computer and animal facilities, are available for this purpose. Students have the opportunity to work with faculty members on a variety of biomedical topics.

Most research is performed between the first and second academic years. Students may be partially funded for their research efforts, based on eligibility, through College work-study or external granting agencies. A compilation of faculty research projects/interests may be obtained from the senior associate dean for preclinical education and research.

## **Undergraduate Fellowship/Joint Degree Programs – Philadelphia Campus**

### **Undergraduate Fellowship in Osteopathic Manipulative Medicine**

The undergraduate OMM Fellowship seeks to assist in the development of the student into a highly skilled clinician in all aspects of osteopathic medicine. Students may enter the undergraduate fellowship after their second year of study. The fellowship extends the clinical clerkship curriculum to three years. At least 12 months of clinical training is provided in the Department of Osteopathic Manipulative Medicine in this special program. Fellows have special academic, clinical and research responsibilities beyond those of other students. Fellows receive remission of tuition, a monthly stipend and travel allowance.

### **DO/MBA Program**

In conjunction with Saint Joseph's University, a master of business administration degree in health and medical services may be earned by DO program students who concurrently complete a five year course of study for the DO degree and a two year program for the MBA. Created in 1989 as the nation's first DO/MBA degree, the curriculum requires approximately 39-42 hours of MBA coursework during two summer sessions and four semesters of evening classes in the joint program. This program responds to the increasing need for business acumen in medical practice. It also prepares physicians for a wide range of emerging careers in medical administration. The St. Joseph's University MBA is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

### **DO/MA in Healthcare Ethics Program**

Osteopathic medical students may obtain a Master of Arts (MA) in Healthcare Ethics from St. Joseph's University while completing the DO program at PCOM by concurrently completing a five year course of study for the DO degree and a

two year program for the MA. This degree combination augments the medical curriculum by enabling PCOM medical graduates to better understand and address the ethical, cultural, and philosophical issues that influence health care and professional practice. Required healthcare ethics courses are scheduled in the evening, weekend, summer session or online, to accommodate the half-time day medical curriculum of the participating students.

### **DO/MPH Program**

Students who have successfully completed their first year of study at PCOM may enter a special joint degree program in affiliation with Temple University, leading to a master of public health degree. Like the DO/MBA program, the master of public health track is a five year program. The DO/MPH program specializes in community health education and prepares physicians to serve as public health officials and to fill positions in community, government and health care agencies. The master of public health degree also prepares students for eventual specialty training and certification in occupational or environmental medicine. The Temple MPH program is accredited by the Council for Education in Public Health (CEPH).

### **DO/MS/PhD in Health Policy Program**

Conducted in association with the University of the Sciences in Philadelphia, the DO/MS/PhD program in health policy studies allows PCOM students to augment their medical education with health policy studies leading to the master of science, with an option to progress to a research-based doctoral program. The program prepares students for positions of local or national leadership in health policy making and analysis through the study of research methods, epidemiology, economics, technology, statistics, law and public health policy. Graduates are trained to research and analyze issues affecting health care delivery and health status in a range of professional settings. The DO/MS/PhD program is a dual-degree track open to qualified first year DO students. Students interested in a non-research health policy program may opt for the MPH in health policy.

### **DO/MS in Forensic Medicine**

Students who have successfully completed their first year of medical study at PCOM may enter a special five year degree program provided by PCOM's Department of Pathology, Microbiology, Immunology and Forensic Medicine, leading to a master of science in forensic medicine. Students complete forensic medicine graduate work through on-campus weekend courses and online instruction during an extended sophomore medical year.

The program provides a core foundation in the theory, principles, ethics, professional practice and legal aspects of forensic medicine. Students acquire skills in the technical aspects of death scene investigation, identifying, preserving and protecting custody of forensic evidence, differentiating accidental and intentional injuries in both living and dead persons, and determining potential forensic value of written and photographic records. The program also provides

skills in the interpretation of research in forensics and skills in utilizing information technology to access information in the forensic sciences.

### **DO/MS in Organizational Development and Leadership (ODL)**

Students who have successfully completed their first year of medical study at PCOM may enter a special five year degree program provided by PCOM's Department of Psychology, leading to a master of science degree in organizational development and leadership. Students complete graduate work through on-campus evening class sessions and during an extended sophomore medical year.

The program is designed to incorporate psychological theory and research in teaching the basic skills and techniques of organizational leadership. The mission of the ODL program is to prepare leaders in the art and science of managing strategic change by teaching the competencies and skill sets for improving organizational performance and realizing human potential. A key training focus of the program is the development of program evaluation methods and the creation and use of performance-based outcome measures.

### **DO/MS in Biomedical Sciences – Neuromusculoskeletal Science Concentration (NMS)**

Students may choose to complete a five year program that provides a foundation of advanced instruction in neuromusculoskeletal sciences and its underlying evidence-base. The program focuses on the philosophy and art of osteopathic medicine; the art of clinical patient observation, palpatory diagnosis and treatment; osteopathic principles and physiologic motions (regional and inter-segmental) in evaluation and diagnosis of musculoskeletal disorders. The course of study includes instruction in research design and statistics, and completion of a master's thesis in neuromusculoskeletal science. Completion of the program provides the student with the competencies to apply advanced neuromusculoskeletal concepts in the clinical practice setting, teach and/or conduct original research in neuromusculoskeletal medicine.

## **Joint Degree Program – Georgia Campus**

### **DO/MBA Program**

Osteopathic medical students at the Georgia Campus may earn the Master of Business Administration in Healthcare Management while completing the DO curriculum through a program in partnership with Brenau University, Gainesville, Georgia. This program responds to the increasing need for business acumen in medical practice. Students concurrently complete a five year course of study for the DO degree and a two year program for the MBA during two summer sessions and four semesters of evening classes. The healthcare management curriculum involves 46 credits of graduate work offered in traditional and online courses. The Brenau University MBA program is accredited by the International Assembly for Collegiate Business Education (IACBE).

## **Post-doctoral Medical Education**

The education of a physician is not complete upon the attainment of a medical degree; it is a continual process. PCOM offers postdoctoral courses and residency programs to further the education of recent graduates of colleges of osteopathic medicine and to maintain the knowledge and skills of practicing osteopathic physicians.

### **Internships and Residencies**

PCOM is continuously expanding internship and residency opportunities to serve the postgraduate educational needs of graduates of PCOM and other osteopathic medical colleges. Through affiliations with Roxborough Memorial Hospital, Chestnut Hill Hospital and many others, approximately 125 PCOM interns and residents are currently in GME training.

PCOM also sponsors AOA-approved internship and residency programs at numerous PCOM MEDNet (OPTI) affiliated hospitals throughout the southeastern Pennsylvania region, which include:

Abington Memorial Hospital\*  
Albert Einstein Medical Center\*  
Altoona Hospital Center for Medicine\*  
Aria Health\*  
Bryn Mawr Hospital\*  
Christiana Care Health Services\*  
Crozer-Chester Medical Center  
Deborah Heart and Lung Center\*  
Delaware County Memorial Hospital/Crozer Keystone Health System  
Geisinger Health System\*  
Heart of Lancaster Regional Medical Center\*  
Lankenau Hospital\*  
Latrobe Area Hospital and Health Network\*  
Lehigh Valley Health Network\*  
The Medical Center, Beaver\*  
Memorial Hospital, York\*  
Mercy Catholic Medical Center  
Mercy Suburban Hospital  
PCOM Consortium  
Pennsylvania Hospital\*  
Pinnacle Health at Community General Osteopathic Hospital\*  
The Reading Hospital and Medical Center\*  
Sacred Heart Hospital (Allentown)\*  
St. Joseph Medical Center (Reading)\*  
St. Joseph's Hospital (North Philadelphia Health System)\*  
St. Luke's Hospital – Allentown Campus\*  
St. Luke's Hospital – Bethlehem Campus\*

\*PCOM-Sponsored Programs



UPMC Shadyside Hospital\*  
Warren Hospital\*  
Williamsport Hospital and Medical Center\*  
Wyoming Valley Hospital\*

The residency programs of PCOM are held to a high standard of clinical excellence, with a commitment to teaching and active encouragement of resident research. An opportunity for completion of a clinical master of science degree as part of the residency program is also available. The College currently offers approved residency training in a wide array of clinical specialties including neuromusculoskeletal medicine, as listed below.

### **Postgraduate Training Programs**

Internship – Approved Positions: 7  
Richard A. Pascucci, DO, Vice Dean for Clinical Education

Emergency Medical Services – Approved Positions: 2  
David Jaslow, MD, Program Director

Otorhinolaryngology – Approved Positions: 15  
Mahmoud Ghaderi, DO, Program Director

Family Practice – Approved Positions: 16  
David Kuo, DO, Program Director

General Surgery – Approved Positions: 35  
Arthur Sesso, DO, Program Director

Geriatrics – Approved Positions: 6  
Katherine Galluzzi, DO, Program Director

Internal Medicine – Approved Positions: 30  
Michael Venditto, DO, Program Director

Neuromusculoskeletal Medicine (NMM+1) – Approved Positions: 4  
Alexander Nicholas, DO, Program Director

Neuromusculoskeletal Medicine (NMM/OMT) – Approved Positions: 3  
Alexander Nicholas, DO, Program Director

Neurosurgery – Approved Positions: 12  
Richard Kanoff, DO, Program Director

OB/GYN – Approved Positions: 20  
Saul Jeck, DO, Program Director

\*PCOM-Sponsored Programs

Ophthalmology – Approved Positions: 7  
Kenneth Heist, DO, Program Director

Orthopedic Surgery – Approved Positions: 30  
Maxwell Stepanuk, DO, Program Director

Plastic and Reconstructive Surgery – Approved Positions: 8  
Sherman Leis, DO, Program Director

Vascular Surgery – Approved Positions: 2  
Matthew Lawrence, DO, Program Director

### **Admission to Postgraduate Training**

Enrollment in the internship and residency programs at PCOM is highly competitive in order for the most qualified applicants to receive the highest quality training. Therefore, it is recommended that application be made at the earliest possible date preceding the annual Commencement of most programs on July 1. The internship program participates in the AOA Intern Match through the Electronic Residency Application Service (ERAS).

The minimum requirements for admission to a rotating internship are:

1. Graduation from a college of osteopathic medicine approved by the American Osteopathic Association.
2. A record of scholastic achievement indicative of the ability to benefit fully from a year of AOA-approved internship training.

The minimum requirements for admission to a residency in one of the various specialties are:

1. Graduation from a college of osteopathic medicine approved by the American Osteopathic Association.
2. Completion of an AOA-approved PGY-1 year.
3. A record of scholastic and clinical achievement indicative of the ability to benefit fully from the residency training program.

Application requests for an internship or residency should be addressed to:

Office of Graduate Medical Education  
Philadelphia College of Osteopathic Medicine  
4190 City Avenue  
Philadelphia, PA 19131  
215-871-6690 or [gme@pcom.edu](mailto:gme@pcom.edu)  
215-871-6695 (fax)

## *Clinical Master of Science Program*

PCOM conducts programs of study in clinical specialties leading to the clinical master of science degree (MSc). This postdoctoral award is available to any candidate pursuing a full-time residency program at one of the affiliated hospitals of PCOM.

Application for admission to the program, leading to a clinical master of science degree, shall be submitted to the vice dean for clinical education at least one academic year prior to the academic year in which the candidate expects to receive his or her degree.

The minimum requirements for admission of residents and interns to the clinical master of science program include all of the following entry criteria:

1. Graduation from a college of osteopathic medicine approved by the American Osteopathic Association.
2. Completion of a PGY-1 internship approved by the American Osteopathic Association.
3. Full-time enrollment in a residency program at a PCOM-affiliated hospital.

For interns and residents, there is no tuition fee.

Osteopathic attending physicians who are staff members at a PCOM-affiliated hospital are also permitted to apply for admission; the tuition fee is \$500 per year of enrollment in the program.

The procedures to be followed for completion of requirements for the master of science degree include:

1. A research project proposal (RPP) describing the proposed research shall be submitted. Research is defined as an original systematic inquiry into a biomedical subject to discover or revise facts, theories, applications, or to improve medical care. The RPP shall have the approval of the chair of the resident's department and then will be submitted in writing to the senior associate dean for clinical education. Osteopathic attending physicians will submit their RPP in writing directly to the vice dean for clinical education. After review, the candidate will be notified in writing of approval of the RPP.
2. After receiving such approval, the candidate will then submit the RPP to the appropriate committees (e.g., IRB, IACUC, Biohazards) of the institution where the research is to be conducted, and forward all letters of approval to the vice dean for clinical education. Upon approval by all appropriate committees, the senior associate dean for clinical education, in consultation with the resident, shall establish a Thesis Committee.

3. The Thesis Committee shall supervise the progress of the project and writing of the thesis. The committee shall be composed of at least three members, including the advisor. It is strongly suggested that one committee member be selected from the College's basic science faculty. The committee membership must be approved by the office of the vice dean for clinical education.
4. The candidate may request advice from any faculty member or others who may be of assistance, but it shall be the responsibility of the candidate to perform all of the necessary requirements for completion of the project, including statistical analysis and writing of the thesis. The candidate shall meet at least twice with the Thesis Committee to report on the progress prior to the final defense.
5. Upon completion of the program, the candidate shall present his or her findings to a general audience of the faculty, as well as to the Thesis Committee in a private session. The deadline for the presentation shall be March 15 of the year in which the degree is expected. The Thesis Committee shall convey its recommendation to the vice dean for clinical education.
6. The vice dean for clinical education shall submit his or her recommendation to the dean, who will petition the president and the board of trustees.
7. The clinical master of science degree shall be awarded at Commencement ceremonies where the doctor of osteopathic medicine degree is conferred.
8. The thesis must be bound and presented to the dean before graduation for deposition in the library.

Questions regarding the Clinical Master of Science program should be directed to:

Director, Clinical Master of Science Program  
Philadelphia College of Osteopathic Medicine  
4170 City Avenue  
Philadelphia, PA 19131  
215-871-6589 or fredg@pcom.edu

### **Continuing Medical Education**

In order to maintain and expand the knowledge and skills of practicing osteopathic physicians and other health professionals, PCOM offers continuing medical education (CME) programs throughout the academic year. The College follows the guidelines of the AOA Committee on Continuing Medical Education and related criteria. Most of the programs are designed to qualify for AOA Category 1A CME credits.

The College offers programs in a wide variety of clinical subjects, osteopathic

therapeutics, medical office management and other topics of importance to the practicing physician. The program includes short weekend seminars, extended programs and special intensive workshops.

All CME programs are organized under the auspices of the Department of Continuing Medical Education and are intended for physicians and other health professionals. Program announcements are mailed with the Pennsylvania Osteopathic Medical Association newsletter. For the CME course calendar published annually, program information, and fee/tuition schedules, inquiries should be addressed to:

Coordinator, Department of Continuing Medical Education  
Philadelphia College of Osteopathic Medicine  
4170 City Avenue  
Philadelphia, PA 19131  
215-871-6348; 215-871-6781 (fax)

The updated CME calendar is also available on PCOM's Web site at [www.pcom.edu](http://www.pcom.edu). Click on "Continuing Medical Education" from the homepage.

# SCHOOL OF PHARMACY

## Doctor of Pharmacy

### **Philosophy**

The PCOM School of Pharmacy - Georgia Campus curriculum emphasizes patient-centered care, a model consistent with the applied emphasis of PCOM's graduate and medical programs. The mission of the GA-PCOM PharmD program is to educate caring, proactive pharmacists according to a practice model in which the practitioner assumes responsibility for a patient's medication-related needs and is held accountable for this commitment. The program also responds to the need for pharmacists in the nation, the state of Georgia, and the southeastern region. The program educates pharmacists who prepare and provide drug products and assume responsibility for the rational use of drugs by contributing to the design, implementation, monitoring and modification of therapeutic plans that will achieve defined goals and improve therapeutic outcomes.

### **Educational Goals**

The GA-PCOM School of Pharmacy prepares generalist, entry-level pharmacists who are able to deliver high-quality pharmaceutical care. To achieve this mission, students must develop the knowledge, skills, and attitudes that enable them to competently: (a) Provide population-based and patient-specific pharmaceutical care, (b) manage and use resources of the health care system, and (c) promote health improvement, wellness, and disease prevention. While preparing pharmacy practitioners is the primary mission of the Doctor of Pharmacy program, the program also provides an avenue by which students may explore a broad range of career opportunities. The program therefore aspires to foster interest in the creation of new knowledge to enhance patient health outcomes and quality of life and also to prepare students for further education.

### **Curriculum**

The program is configured in a curricular format in which students complete:

1. the pre-professional phase (3 or 4 years) of general education, biomedical and pre-pharmaceutical sciences instruction at undergraduate colleges
2. the last four years of pharmacy sciences and practice instruction at the GA-PCOM facility, as well as clinical experiences at clinical sites throughout Georgia and the southeast.

Each term is a 13 week, period, corresponding to the calendar used by the PCOM Doctor of Osteopathic Medicine programs in both Philadelphia and Georgia. The extension of coursework over the three terms each academic year provides the opportunity for the across-the-curriculum development of skills.

The curriculum is composed of courses in biomedical sciences, pharmaceutical sciences, social/behavioral/administrative sciences, and clinical sciences. A number of elective courses will be available to allow students to enhance their knowledge of pharmacy related topics in specific areas. There are five

Introductory Pharmacy Practice Experiences (IPPE) in which students are given exposure to pharmacy practices in a variety of different practice sites and begin their hands-on experiences. The final year of the program consists of the Advanced Pharmacy Practice Experiences (APPE) in which students are required to complete eight different rotations. These rotations consist of five weeks in a particular pharmacy practice site.

Required rotations include:

- Medicine
- Ambulatory Care
- Hospital Practice
- Community Practice

Elective rotations will include rotations such as (but not limited to):

- Cardiology
- Infectious Diseases
- Pediatrics
- Compounding Pharmacy
- Pharmaceutical Industry Management

This curriculum, including active learning skills development time, is designed to develop the knowledge, professional skills, professional attitudes and values that are required for an entry level pharmacist.

### **Requirements for Graduation**

Each candidate for the degree of Doctor of Pharmacy (PharmD) must be of good moral character and have completed satisfactorily all academic requirements in the program of study. All requirements for the degree must be completed within seven years from the date of initial matriculation. PharmD graduates must demonstrate that they have acquired competency in six basic areas of knowledge, skills and values: pharmacy knowledge and practice skills, patient care skills, communication/ interpersonal skills, professionalism, understanding and skills in the use of information and empirical evidence, and skills in systems-based practice.

### **Licensure**

In general, in order to take the pharmacist licensure examination, boards of pharmacy will require successful completion of the requirements for the Doctor of Pharmacy degree from an accredited institution and completion of a certain number of hours as a pharmacy intern. In Georgia, applicants for pharmacist licensure must be at least 18 years of age, have graduated from an approved school of pharmacy and completed 1,500 hours of internship under the supervision of a registered pharmacist. Schools of pharmacy in Georgia allow students to claim credit for 1,000 internship hours obtained during experiential rotations and the student is required to obtain 500 additional hours on their own as a licensed pharmacy intern. An applicant may register with the Georgia Board of Pharmacy as a pharmacy intern if he or she is registered in an accredited

school/college of pharmacy.

All students at the PCOM School of Pharmacy - Georgia Campus are required to obtain their Georgia intern license during the first semester and the School will assist with the application process. Any student found to be ineligible to be licensed as a Pharmacy Intern in the State of Georgia, at any time during their tenure at the PCOM School of Pharmacy – Georgia Campus, will be dismissed from the program. PCOM students must maintain their intern license in order to legally participate in the experiential pharmacy rotations. The licensure requirements for pharmacists and pharmacy interns vary by state and it is recommended that applicants inquire with the board of pharmacy in the state where they intend to practice if they have any questions.



## GRADUATE PROGRAMS

### **Clinical Psychology – Doctor of Psychology (PsyD)**

PCOM's Psychology Department presents a practitioner-scholar program that prepares graduates for leadership roles in clinical psychology. The PsyD program is a multi-year American Psychological Association accredited curriculum designed for in-career professionals. The curriculum integrates the Department of Psychology's interdisciplinary core graduate courses, the competencies listed by the National Council of Schools of Professional Psychology, and the core areas of the American Psychological Association and the National Register. Successful completion of the program allows the graduate to qualify for the Examination for Professional Practice of Psychology (EPPP) for licensure as a psychologist. The PsyD program has four major components:

1. The sequence of courses, which includes a minimum of eight terms of practicum experience.
2. Passing the three-part comprehensive examination. Completion of the first two portions of the comprehensive examination makes students eligible to begin the dissertation process.
3. Completing a dissertation.
4. Completing a clinical psychology internship. Successful completion of the first three years of coursework and the comprehensive examination confers doctoral candidate status on the PsyD student, who may then proceed to internship.

Upon completion of the comprehensive examination and admission to doctoral candidacy, students are awarded a master of science in clinical psychology.

### **School Psychology – Doctor of Psychology (PsyD)**

The PsyD in the School Psychology program is intended for specialist-level certified school psychologists and requires the MA or MS and specialist level training (minimum) of 60 graduate credits as a prerequisite. One 3-credit course in each of the core foundation areas including: ethics, research, statistics, psychometric theory, biological basis of behavior, cognitive-affective bases of behavior, social bases of behavior, and individual differences as well as courses in consultation and educational assessment is required. The doctoral program requires 57 credits beyond the specialist level, with coursework in professional school psychology, consultation/intervention, development, cognitive therapy, community psychology, assessment and electives. The school psychology program is a therapy-focused track with classes in a traditional evening on-campus schedule. The program is NASP-approved and includes a specialty internship, colloquium and a final doctoral project.

### **School Psychology – Master of Science (MS)**

The Master of Science in School Psychology program is designed to provide

students with a broad theoretical and practical background in psychology, child development, learning and research. It is a training program to prepare paraprofessionals in community and school settings that provide mental health services to children, youth and families. The program requires 36 credits of graduate study including 18 credits of residency and a comprehensive examination. The MS program is augmented by the specialist-level certification curriculum for students seeking state certification as school psychologists.

### **School Psychology – Educational Specialist (EdS)**

The certification curriculum serves school personnel, social workers and others with a master's degree in a field related to psychology or students who have completed the PCOM MS in School Psychology program. The program is an applied professional psychology curriculum focusing on the interrelation of school learning and social, emotional and behavioral functioning and requires 45 graduate credits beyond the master's degree. Upon completion of program requirements and a satisfactory score on the PRAXIS I exam, graduates can attain school psychologist certification by the Commonwealth of Pennsylvania and apply for national (NCSP) certification eligibility. The program is NASP-approved.

### **Counseling and Clinical Health Psychology – Master of Science (MS)**

Graduates of the master of science in counseling and clinical health psychology program are prepared to provide evaluation, counseling and therapy services to clients in a variety of clinical settings with an emphasis on using psychological interventions in the treatment of medical problems. This two-year, 48-credit program trains mental health care providers to work in primary care settings, collaborating with the primary care physician utilizing a biopsychosocial model. The MS curriculum, in conjunction with four certificates of advanced graduate studies (CAGS) courses, is designed to fulfill the course requirements for the Pennsylvania Licensed Professional Counselor Examination. Students may also elect a concentration in addictions and offender counseling. Applicants to the MS program must have a bachelor's degree from an accredited institution.

### **Organizational Development and Leadership – Master of Science (MS) and Certificate**

Designed for the working professional, the master of science in organizational development and leadership program prepares working professionals to use the theory, skills and techniques of organization building and leadership to become leaders in their field. The 36-credit master program and the 18-credit certificate program are designed to incorporate psychological theory and research in teaching the basic skills and techniques of organizational leadership. The mission of the ODL program is to prepare leaders in the art and science of managing strategic change by teaching the competencies and skill sets for improving organization performance and realizing human potential. A key training focus of the program is the development of program evaluation methods and the creation and use of performance-based outcome measures. Coordinated by the Department of Psychology, the coursework is scheduled in evenings and on weekends.

### **Biomedical Sciences – Certificate and Master of Science (MS)**

The PCOM graduate program in biomedical sciences provides an opportunity for students with baccalaureate degrees to study the biomedical sciences as preparation for science careers or professional study. The program presents a broad content base in the basic biomedical sciences with a strong emphasis on human medicine and clinical applications of the material. Both the certificate program and degree tracks provide coursework in the major medical basic science subjects and share a core of foundation courses.

The certificate program is a one-year full-time curriculum designed for college graduates who are preparing for admission to medical school or other health professions' degree programs. It is expected that most students in the certificate track will enter professional study after one year of graduate work. Students with satisfactory first year academic performance in the certificate program may apply their work to the degree track leading to the master of science in biomedical sciences.

The degree program provides a strong base of biomedical content in the first year, followed by a concentration in the degree candidacy year(s). Degree candidates may choose concentration tracks in biomedical research (thesis), organizational leadership in the biosciences or forensic biology. A non-thesis master of science track in advanced topics in biomedicine is also available at PCOM's Georgia Campus.

### **Physician Assistant Studies – Master of Science (MS in Health Sciences)**

PCOM offers a full-time 26-month graduate-level program in physician assistant studies. The program provides a comprehensive didactic and laboratory year followed by a year of clinical preceptorships in a diverse variety of clinical areas. All students complete a research practicum as part of the program.

Many students progress to the graduate program via a collaboration between PCOM and the University of the Sciences in Philadelphia (USP). Students are accepted upon completion of high school to the three-year pre-professional phase of the program, which leads to a BS in health sciences from USP. Students who meet progression standards may then progress to the professional phase, leading to a master of science in health sciences from PCOM. The dual degree track is a five-year curriculum. In 2009, a similar collaboration commenced between PCOM and Brenau University in Gainesville, GA. Students with baccalaureate degrees may apply for admission directly to the professional phase of the PA program.

### **Forensic Medicine – Master of Science (MS)**

The master's degree in forensic medicine program is intended for professionals who desire advanced knowledge, skills and credentialing in this specialized health area. Law enforcement professionals, nurse practitioners, paramedics and other mid-level health professionals seeking a graduate degree can benefit from this program, which is scheduled in evening and weekend sessions to

accommodate the working professional. The forensic medicine program focuses on the emerging demand for medico-legal investigations by medical examiner staff and provides a foundation in forensic investigations and autopsy skills.

### **Forensic Medicine Pathway Program**

The Pathway program is designed for non-science majors who are interested in forensic medicine and who possess a bachelor's degree in a forensic-related field (e.g., criminal justice, psychology, sociology or anthropology). This program is designed to allow those without a strong science background to receive the necessary preparation for the master of science in forensic medicine program. The Pathway program is a 14-week preparatory course in general biology and human anatomy and physiology that lasts from May to August. Upon successful completion, the student will enter the master of science in forensic medicine degree program starting the following fall term. (Please note that no degree is awarded upon completion of the Pathway program.)

### **Post-doctoral Certificate in Psychology**

PCOM's Post-Doctoral Certificates in Clinical Health Psychology and in Clinical Neuropsychology each provide one year (16 and 19 credits respectively) of specialty training to doctoral-level psychologists or current PCOM Clinical PsyD students that will enable them to render ethical comprehensive services in medical settings and to medical patients.

### **Certificate of Advanced Graduate Studies in Psychology**

This program provides graduate-level psychology and counseling courses to individuals seeking to meet credentialing requirements or augment their training. The Psychology Department offers two CAGS specialization tracks: Certificate of Advanced Graduate Study in Cognitive Behavior Therapy and Certificate of Advanced Graduate Study in Professional Psychology. Applicants for a Certificate of Advanced Graduate Study must have completed a master's degree in psychology, counseling or a related discipline. Students will complete 12 graduate credits to earn the certificate. Classes are held on weekday evenings and on some weekends.

The Cognitive Behavior Therapy (CBT) Track is designed to train mental health professionals in the application, theory and advanced practice of cognitive behavior therapy. A 6-credit cognitive behavior therapy seminar taught by Arthur Freeman, EdD, ABPP, forms the basis of this program. This seminar runs from September through June and is held on one Saturday a month plus one full Sunday. In addition, students complete two 3-credit courses taught with a cognitive behavior therapy focus.

The Professional Psychology Track is an individualized program designed to provide mental health professionals with the courses necessary to take the licensing exam that leads to a Licensed Professional Counselor (LPC) credential in Pennsylvania and the National Certified Counselor (NCC) Credential. These courses may be used in conjunction with an earned master's degree from an

accredited college to complete the 60 course credits required to take the LPC licensing exam. For additional information regarding Pennsylvania state licensing requirements, students are encouraged to visit the Web site for the Pennsylvania State Board of Social Workers, Marriage and Family Therapists and Professional Counselors. Students needing more than 12 credits to take the licensure examination may take up to two additional graduate courses offered within PCOM's MS program in Counseling and Clinical Health Psychology program at the discretion of the program director.

Department of Psychology  
Philadelphia College of Osteopathic Medicine  
4190 City Avenue  
Philadelphia, PA 19131  
215-871-6442 or 215-871-6458 (fax)

### **Special Graduate Programs**

These programs offer specialized courses to practitioners in education (primary and secondary school teachers, counselors and other educators) and organizational development professionals. The programs draw from PCOM's resources in the behavioral sciences to provide unique interdisciplinary instructional perspectives often not available in traditional graduate courses in education, organizational development or administration. Education Institute courses carry credit from the Department of Psychology for Act 48 compliance.

## SYNOPSIS OF CURRICULA

### Doctor of Osteopathic Medicine - Philadelphia Campus

#### **First Year**

##### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 111 . . . . .	Structural Principles of Osteopathic Medicine . . . . .	13
DO 139A . . . . .	Osteopathic Principles and Practice I . . . . .	2
DO 140A . . . . .	Primary Care Skills I . . . . .	1
<b>Total Credits . . . . .</b>		<b>16</b>

##### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 121 . . . . .	Cellular and Molecular Basis of Medicine . . . . .	14
DO 139B . . . . .	Osteopathic Principles and Practice II . . . . .	2
DO 140B . . . . .	Primary Care Skills II . . . . .	1
<b>Total Credits . . . . .</b>		<b>17</b>

##### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 133 . . . . .	Emergency Medicine I . . . . .	1
DO 134 . . . . .	Cardiovascular, Renal and Pulmonary Medicine . . . . .	12
DO 138A . . . . .	Preventive and Community-Based Medicine I . . . . .	1
DO 139C . . . . .	Osteopathic Principles and Practice III . . . . .	2
DO 140C . . . . .	Primary Care Skills III . . . . .	1
<b>Total Credits . . . . .</b>		<b>17</b>

All first year courses must be completed prior to beginning the second year courses.

## Doctor of Osteopathic Medicine - Philadelphia Campus

### **Second Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 212	Gastroenterological Sciences	.5
DO 213	Reproductive Genitourinary and Obstetrics, Gynecologic Medicine	.8
DO 224	Rheumatic Disease	.1
DO 238A	Preventive and Community-Based Medicine II	.0.5
DO 239A	Osteopathic Principles and Practice IV	.2
DO 240A	Primary Care Skills IV	.1
DO 311	Medical Law	.2
<b>Total Credits</b>		<b>19.5</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 221	Clinical Endocrinology	.3
DO 222	Clinical and Basic Neuroscience	.13
DO 232	Dermatology	.1
DO 238B	Preventive and Community-Based Medicine III	.0.5
DO 239B	Osteopathic Principles and Practice V	.2
DO 240B	Primary Care Skills V	.1
<b>Total Credits</b>		<b>20.5</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 231	General Surgery	.3
DO 233	Life Stages: Clinical Geriatrics and Pediatrics	.4
DO 235	Emergency Medicine II	.1
DO 236	Eyes, Ears, Nose and Throat	.1
DO 238C	Preventive and Community-Based Medicine IV	.1
DO 239C	Osteopathic Principles and Practice VI	.2
DO 240C	Primary Care Skills VI	.1
<b>Total Credits</b>		<b>13</b>

**Total credits first and second Year** . . . . . 103

**Third and Fourth Year DO Program Clinical Clerkship Curriculum - Philadelphia Campus**

***Third Year*** (12 Months)

<b>ROTATION</b>	<b>CREDIT HOURS</b>
Advanced Clinical Skills	17*
Elective (1)	17
Family Medicine	17
General Internal Medicine	17
General Surgery	17
Internal Medicine/Cardiology	17
Internal Medicine Selective	17
Obstetrics and Gynecology	17
OMM/Family Medicine/Palliative Care	17
Pediatrics	17
Psychiatry	17
Surgery	17
Winter Break	

\*Includes noncredit American Heart Association Advanced Cardiac Life Support (ACLS) course completion, required for graduation.

***Fourth Year*** (12 Months)

<b>ROTATION</b>	<b>CREDIT HOURS</b>
Ambulatory Surgery/Surgery Sub-1	17
Elective (5)	85
Emergency Medicine	17
Health Care Center	
Rural	17
Urban (2)	34
Internal Medicine	17
Medicine Sub-Internship	17

Each 17 credit rotation requires 240 contact hours



## Doctor of Osteopathic Medicine - Philadelphia Campus

### Special Program - Dual Degree

Doctor of Osteopathic Medicine/MS Biomedical Science Neuromusculoskeletal concentration.

Students enrolled in the DO program prior to completion of their second year of DO studies must apply for this special program DO/MS degree.

#### REQUIRED FOUNDATIONAL COURSES:

Course No	Course Title	Credits
BOMM 501	Advanced Clinical Skills in Neuromusculoskeletal Science I	6
BOMM 502	Advanced Clinical Skills in Neuromusculoskeletal Science II	6
BOMM 503	Advanced Clinical Skills in Neuromusculoskeletal Science III	6
<b>Total Credits</b>		<b>18</b>

#### OPTIONAL FOUNDATION COURSE:

Course No	Course Title	Credits
BOMM 504	Special Topics in Neuromusculoskeletal Science	3
<b>Total Credits</b>		<b>3</b>

#### CORE TEACHING PRACTICUM:

Course No	Course Title	Credits
BOMM 591	Practicum Lab I: Teaching Physician-Level Palpatory and Psychomotor Skills	4
BOMM 592	Practicum Lab II: Teaching Physician-Level Myofascial and Craniocervical Psychomotor Skills	4
BOMM 593	Practicum Lab III: Teaching Psychomotor Skills to Address Systemic and Appendicular Disorders	4
<b>Total Credits</b>		<b>12</b>

#### RESEARCH COURSES:

Course No	Course Title	Credits
BOMM 691	Research Design	6
BOMM 692	Neuromusculoskeletal Tests and Measurements	6
BOMM 693	Statistical Analysis and Data Synthesis	6
BOMM 694	Thesis	6
<b>Total Credits</b>		<b>24</b>

## Doctor of Osteopathic Medicine - Georgia Campus

### **First Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 111G . . . . .	Structural Principles of Osteopathic Medicine . . . . .	13
DO 138AG . . . . .	Preventive and Community-Based Medicine I . . . . .	1
DO 139AG . . . . .	Osteopathic Principles and Practice I . . . . .	2
DO 140AG . . . . .	Primary Care Skills I . . . . .	2
<b>Total Credits</b> . . . . .		<b>18</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 121G . . . . .	Cellular and Molecular Basis of Medicine . . . . .	14
DO 138BG . . . . .	Preventive and Community-Based Medicine II . . . . .	1
DO 139BG . . . . .	Osteopathic Principles and Practice II . . . . .	2
DO 140BG . . . . .	Primary Care Skills II . . . . .	2
<b>Total Credits</b> . . . . .		<b>19</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 130G . . . . .	Basic and Clinical Neurosciences . . . . .	14
DO 133G . . . . .	Emergency Medicine I . . . . .	1
DO 138CG . . . . .	Preventive and Community-Based Medicine III . . . . .	1
DO 139CG . . . . .	Osteopathic Principles and Practice III . . . . .	2
DO 140CG . . . . .	Primary Care Skills III . . . . .	2
<b>Total Credits</b> . . . . .		<b>20</b>

## Doctor of Osteopathic Medicine - Georgia Campus

### **Second Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 134G . . . . .	Cardiovascular, Pulmonary and Renal Medicine . . . . .	12
DO 215G . . . . .	Psychiatry . . . . .	2
DO 239AG . . . . .	Osteopathic Principles and Practice IV . . . . .	2
DO 240AG . . . . .	Primary Care Skills IV . . . . .	1
DO 311G . . . . .	Medical Law . . . . .	2
<b>Total Credits</b> . . . . .		<b>19</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 211G . . . . .	Basic and Clinical Endocrinology . . . . .	3
DO 212G . . . . .	Gastroenterology . . . . .	4
DO 213G . . . . .	Reproductive and Genitourinary Sciences . . . . .	6
DO 235G . . . . .	Emergency Medicine II . . . . .	2
DO 239BG . . . . .	Osteopathic Principles and Practice V . . . . .	2
DO 240BG . . . . .	Primary Care Skills V . . . . .	1
<b>Total Credits</b> . . . . .		<b>18</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
DO 214G . . . . .	Musculoskeletal/Skin . . . . .	4
DO 232G . . . . .	Surgery, Ophthalmology, ENT . . . . .	2
DO 233G . . . . .	Life Stages: Geriatrics and Pediatrics . . . . .	2
DO 239CG . . . . .	Osteopathic Principles and Practice VI . . . . .	2
DO 240CG . . . . .	Primary Care Skills VI . . . . .	1
<b>Total Credits</b> . . . . .		<b>11</b>

**Total credits first and second Year . . . . . 105**

**Third and Fourth Year DO Program Clinical Clerkship Curriculum - Georgia Campus**

***Third Year***

<b>ROTATION</b>	<b>CREDIT HOURS</b>
Advanced Clinical Skills	17
Elective	17
Emergency Medicine	17
Family Medicine	17
General Internal Medicine	17
General Surgery	17
Internal Medicine Selective	17
Obstetrics & Gynecology	17
OMM/Family Medicine	17
Pediatrics	17
Psychiatry	17
Surgery Selective	17

***Fourth Year***

<b>ROTATION</b>	<b>CREDIT HOURS</b>
Adult Geriatric Medicine	17
Electives (5)	85
Internal Medicine – Ambulatory	17
Internal Medicine	
Sub-Internship/elective	17
Underserved /Rural Family Medicine	34
Surgery Sub-Internship/elective	17

Each 17 credit rotation requires 240 contact hours.

## Doctor of Pharmacy - Georgia Campus

### **First Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 111G	Anatomy and Physiology	3
PHAR 112G	Anatomy Lab	1
PHAR 116G	Introduction to Drugs	3
PHAR 119G	Pharmacy Communications	2
PHAR 121G	Health Care Systems	2
PHAR 133G	Introduction to Pharmacy	1
<b>Total Credits</b>		<b>12</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 113G	Physiology and Pathophysiology I	3
PHAR 141G	Pharmaceutics	3
PHAR 145G	Pharmaceutical Calculations	2
PHAR 150G	Biochemistry	3
PHAR 155G	Pharmacy Practice Lab I	1
PHAR 171G	IPPE I	1
<b>Total Credits</b>		<b>13</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 114G	Physiology and Pathophysiology II	3
PHAR 162G	Pharmaceutics Lab	1
PHAR 164G	Pharmacy Administration	3
PHAR 167G	OTC	2
PHAR 169G	Biopharmaceutics	3
PHAR 172G	IPPE II	1
<b>Total Credits</b>		<b>13</b>

## Doctor of Pharmacy - Georgia Campus

### **Second Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 211G . . . . .	Integrated Therapeutics I . . . . .	4
PHAR 224G . . . . .	Immunology and Microbiology . . . . .	4
PHAR 227G . . . . .	Pharmacokinetics . . . . .	3
PHAR 261G . . . . .	IPPE III . . . . .	1
<b>Total Credits</b> . . . . .		<b>12</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 212G . . . . .	Integrated Therapeutics II . . . . .	4
PHAR 241G . . . . .	Infectious Disease I . . . . .	3
PHAR 246G . . . . .	Pharmacy Practice . . . . .	3
PHAR 256G . . . . .	Pharmacy Practice Laboratory II . . . . .	1
PHAR 262G . . . . .	IPPE IV . . . . .	1
<b>Total Credits</b> . . . . .		<b>12</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 213G . . . . .	Integrated Therapeutics III . . . . .	4
PHAR 242G . . . . .	Infectious Disease II . . . . .	3
PHAR 271G . . . . .	Biostatistics . . . . .	3
	Elective . . . . .	2
<b>Total Credits</b> . . . . .		<b>12</b>

## Doctor of Pharmacy - Georgia Campus

### **Third Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 331G . . . . .	IPPE V . . . . .	2
<b>Total Credits</b> . . . . .		<b>2</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 311G . . . . .	Integrated Therapeutics IV . . . . .	4
PHAR 314G . . . . .	Hospital Pharmacy . . . . .	3
PHAR 321G . . . . .	Pharmacy Practice Laboratory III . . . . .	1
PHAR 323G . . . . .	Drug Literature Evaluation . . . . .	3
	Elective . . . . .	2
<b>Total Credits</b> . . . . .		<b>13</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 312G . . . . .	Integrated Therapeutics V . . . . .	4
PHAR 346G . . . . .	Pharmacoeconomics . . . . .	3
PHAR 351G . . . . .	Toxicology . . . . .	3
	Elective . . . . .	2
<b>Total Credits</b> . . . . .		<b>12</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHAR 368G . . . . .	Pharmacy Law and Ethics . . . . .	4
PHAR 375G . . . . .	Capstone . . . . .	4
PHAR 377G . . . . .	Seminar . . . . .	1
	Elective . . . . .	2
<b>Total Credits</b> . . . . .		<b>11</b>

Doctor of Pharmacy - Georgia Campus

**Fourth Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
.....	APPE I .....	.4
.....	APPE II .....	.4
<b>Total Credits</b> .....		<b>8</b>

**TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
.....	APPE III .....	.4
.....	APPE IV .....	.4
<b>Total Credits</b> .....		<b>8</b>

**TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
.....	APPE V .....	.4
.....	APPE VI .....	.4
<b>Total Credits</b> .....		<b>8</b>

**TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
.....	APPE VII .....	.4
.....	APPE VIII .....	.4
<b>Total Credits</b> .....		<b>8</b>

**Total credits required for completion of certificate** ..... 144



## Graduate Programs

### Certificate in Biomedical Sciences - Philadelphia Campus

#### **First Year**

##### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 501 . . . . .	Molecular Basis of Medicine . . . . .	7
BIOM 502 . . . . .	The Infectious Process . . . . .	3
<b>Total Credits . . . . .</b>		<b>10</b>

##### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 503 . . . . .	Human Anatomy . . . . .	6
BIOM 504 . . . . .	Histology . . . . .	4
<b>Total Credits . . . . .</b>		<b>10</b>

##### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 505 . . . . .	Neurosciences . . . . .	3
BIOM 506 . . . . .	Medical Pharmacology . . . . .	3
BIOM 507 . . . . .	Physiology . . . . .	3
<b>Total Credits . . . . .</b>		<b>9</b>

**Total credits required for completion of certificate . . . . . 29**

## **Biomedical Science - Master of Science**

*Master of Science degree can also be awarded in one of the following concentrations:*

Biomedical Science – Research Concentration  
Philadelphia and Georgia Campus

Biomedical Science – Non-Thesis Concentration  
Georgia Campus

Biomedical Science – Forensic Biology Concentration  
Philadelphia and Georgia Campus

Biomedical Science – Neuromusculoskeletal Concentration  
Philadelphia Campus

Biomedical Science – Organizational Leadership in the Biosciences  
Philadelphia Campus

(Concentrations can start the summer or fall after completing the Biomedical Science Certificate.)

**Biomedical Science - Master of Science - Research Concentration  
- Philadelphia Campus**

**TERM 1(FALL) \***

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 690 . . . . .	Research Methods . . . . .	2
BIOM 691 . . . . .	Biomedical Science Research I** . . . . .	6
<b>Total Credits . . . . .</b>		<b>8</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 692 . . . . .	Biomedical Science Research II . . . . .	8
<b>Total Credits . . . . .</b>		<b>8</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 693 . . . . .	Biomedical Science Research III . . . . .	8
<b>Total Credits . . . . .</b>		<b>8</b>

**TERM 4\*\***

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 699 . . . . .	Thesis Continuation . . . . .	1
<b>Total Credits . . . . .</b>		<b>1</b>

**Total credits required beyond certificate for degree completion . . . . . 24**

\*Can start summer or fall after certificate program. If student starts in summer, then will take BIOM 691 for 8 credits and BIOM 692 in fall for 6 credits. Journal Club attendance is a component of the Biomedical Science Research concentration.

\*\*Upon registration of 24 credits, if student has not defended research, then the student must register for 1 credit thesis continuation until defended research.

## Certificate in Biomedical Sciences - Georgia Campus

### **First Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 553G . . . . .	Basic Concepts in Biomedical Modeling . . . . .	4
BIOM 558G . . . . .	Biochemistry, Cellular and Molecular Biology . . . . .	5
<b>Total Credits</b> . . . . .		<b>9</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 551G . . . . .	Human Gross Anatomy . . . . .	5
BIOM 557G . . . . .	Microscopic Anatomy and Embryology . . . . .	6
<b>Total Credits</b> . . . . .		<b>11</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 554G . . . . .	Neuroscience . . . . .	4
BIOM 556G . . . . .	Human Physiology . . . . .	5
<b>Total Credits</b> . . . . .		<b>9</b>

**Total credits required for completion of certificate . . . . . 29**

Biomedical Sciences - Master of Science Non-Thesis  
Concentration - Georgia Campus

**Second Year**

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 602G . . . . .	Infection and Immunity . . . . .	5
BIOM 609G . . . . .	Biostatistics and Epidemiology . . . . .	3
<b>Total Credits</b> . . . . .		<b>8</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 603G . . . . .	Concepts in Pharmacology and Toxicology . . . . .	4
BIOM 604G . . . . .	Nutritional Biochemistry . . . . .	4
<b>Total Credits</b> . . . . .		<b>8</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 606G . . . . .	Analytical Reading . . . . .	2
BIOM 607G . . . . .	Independent Study/Scientific Composition . . . . .	6
<b>Total Credits</b> . . . . .		<b>8</b>

**Total credits required beyond certificate for degree completion . . . . . 24**

**Biomedical Sciences - Master of Science Thesis Track**  
**- Georgia Campus**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
BIOM 609G . . . . .	Biostatistics and Epidemiology . . . . .	3
BIOM 693G . . . . .	Biomedical Research/Elective Courses . . . . .	6-21
<b>Total Credits . . . . .</b>		<b>24</b>

**Total credits required beyond certificate for degree completion . . . . . 24**

**Year II Research:** Graduate students under the supervision of a mentor will be required to take Biostatistics/Epidemiology and can enroll in other Year 2 courses as advised by their mentor. In addition, they will be expected to be full-time students and be present on campus or in a lab for the time required to meet their advisor's expectations. All Thesis students will fill out the balance of their second year with Research hours unless their mentor requests that they take additional hours of upper level coursework specific to their area of focus. In no case will a student enroll in less than 12 hours of Biomedical Research-693G to fulfill the research and Thesis requirement. It should be noted by all students looking at this track that there is an expectation that full-time graduate students during this year will be engaged in research the entire year and that students should plan on utilizing the summer between years one and two to fulfill requirements in research orientation within a given lab.

**Forensic Biology Concentration - Philadelphia and Georgia Campus**

Forensic biology track students receive practical instruction through coursework and an internship in a medical examiner's office. The forensic biology track is a combination of online instruction and intensive weekend sessions. The weekend sessions are held at the Philadelphia Campus.

***First Year***

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 500 . . . . .	Pathology for Forensic Medicine . . . . .	4
<b>Total Credits . . . . .</b>		<b>4</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 501 . . . . .	Principles of Forensic Medicine I . . . . .	6
<b>Total Credits . . . . .</b>		<b>6</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 502 . . . . .	Principles of Forensic Medicine II . . . . .	6
<b>Total Credits . . . . .</b>		<b>6</b>

***Second Year***

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 508 . . . . .	Capstone Integrated Experience . . . . .	8
<b>Total Credits . . . . .</b>		<b>8</b>

**Total credits required beyond foundation year for degree completion . . . . . 24**

**Organizational Leadership in the Biosciences Concentration - Philadelphia Campus**

Students may choose to complete the MS in a concentration that focuses on the application of leadership and organizational skills in developing the student's ability to lead organizational change that achieves desired organizational results. Instruction is conducted in the evening at the Philadelphia Campus and comprises 21 credits of organizational leadership concentration coursework as follows:

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
ODL 501 . . . . .	Foundations and Systems of Organizational Development . . . . .	3
ODL 502 . . . . .	Understanding the Business of Organizations . . . . .	3 or
ODL 508 . . . . .	Leadership for Practitioners . . . . .	3
ODL 505 . . . . .	Team Dynamics . . . . .	3 or
ODL 506 . . . . .	Social Factors and Cultural Diversity . . . . .	3
ODL 510 . . . . .	Capstone . . . . .	3
ODL 512 . . . . .	Small and Large Systems: Diagnosis and Change . . . . .	3
ODL 513 . . . . .	Business and Professional Communications . . . . .	3
ODL 514 . . . . .	Managing Emotional Systems in the Workplace . . . . .	3
<b>Total credits required beyond certificate for degree completion . . . . .</b>		<b>21</b>



Master of Science - Forensic Medicine

**First Year**

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 500 . . . . .	Pathology for Forensic Medicine . . . . .	4
<b>Total Credits</b> . . . . .		<b>4</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 501 . . . . .	Principles of Forensic Medicine I . . . . .	6
<b>Total Credits</b> . . . . .		<b>6</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 502 . . . . .	Principles of Forensic Medicine II . . . . .	6
<b>Total Credits</b> . . . . .		<b>6</b>

All first year courses are on-campus courses.

## Master of Science - Forensic Medicine

### **Second Year**

All second year courses except for Capstone Integrated Experience are online courses.

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 504 . . . . .	Research Design and Methodology . . . . .	4
<b>Total Credits</b> . . . . .		<b>4</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 506 . . . . .	Evidence-Based Forensic Medicine . . . . .	4
<b>Total Credits</b> . . . . .		<b>4</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 505 . . . . .	Bioethics in Professional Practice . . . . .	4
<b>Total Credits</b> . . . . .		<b>4</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 513 . . . . .	Law and Evidentiary Procedure . . . . .	4
<b>Total Credits</b> . . . . .		<b>4</b>

### **Third Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
FMED 508 . . . . .	Capstone Integrated Experience . . . . .	8
<b>Total Credits</b> . . . . .		<b>8</b>

**Total credits required for degree completion . . . . . 40**

## Master of Science - Physician Assistant Studies

### **First Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 502	Human Gross Anatomy	6
PHYA 519	Human Physiology	4
<b>Total Credits</b>		<b>10</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 501	Pharmacological Concepts and Pharmacotherapeutics	2
PHYA 503	History Taking and Physical Examination	10
PHYA 514	Professional Practice Issues and Health Policy	3
PHYA 517	Genetics*	1
PHYA 531	Community Health Service I	2
PHYA 542	Research Methods	2
<b>Total Credits</b>		<b>20</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 510	Clinical Medicine I	10
PHYA 515	Medicine, Law and Health Care Ethics	1
PHYA 520	Pharmacology I	2
PHYA 535	Pathology I	2
PHYA 543	Evidence-Based Medicine	2
<b>Total Credits</b>		<b>17</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 511	Clinical Medicine II	10
PHYA 521	Pharmacology II	2
PHYA 532	Community Health Service II	1
PHYA 536	Pathology II	2
PHYA 549	Radiology for the Physician Assistant	2
<b>Total Credits</b>		<b>17</b>

\*This is year-long course.

## Master of Science - Physician Assistant Studies

### **Second Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 512	Clinical Medicine III	12
PHYA 522	Pharmacology III	1
PHYA 530	Behavioral Medicine and Psychiatry	2
PHYA 537	Pathology III	2
<b>Total Credits</b>		<b>17</b>

All first and second year courses must be completed prior to beginning clinical preceptorships.

#### **TERM 2 THROUGH TERM 4 (FALL, WINTER AND SPRING)**

##### **PRECEPTORSHIPS**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 550	Family Medicine Preceptorship	10
PHYA 551	Internal Medicine Preceptorship	10
PHYA 553	Emergency Medicine Preceptorship	10
PHYA 554	Gynecology/Prenatal Preceptorship	10
PHYA 555	General Surgery Preceptorship	10
PHYA 556	Behavioral Medicine and Long Term Care Preceptorship	10
PHYA 557	Pediatrics Preceptorship	10
<b>Total Credits</b>		<b>70</b>

### **Third Year**

#### **TERM 1 (SUMMER: MAY THROUGH END OF JULY)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PHYA 558	Elective Preceptorship	6
PHYA 560	Research Practicum	3
PHYA 562	Comprehensive Preceptorship Review	3
<b>Total Credits</b>		<b>12</b>

**Total credits required for degree completion** . . . . . 163

## Master of Science - Organizational Development and Leadership

### Six Required Courses

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
ODL 501	Foundations and Systems of Organizational Development	3
ODL 504	Personal and Professional Development	3
ODL 505	Team Dynamics	3
ODL 510	Capstone (completed in the last term)	3
ODL 513	Business and Professional Communications	3
ODL 514	Managing Emotional Systems in the Workplace	3
<b>Total Credits</b>		<b>18</b>

### Elective Courses – Choose six courses from list below

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
ODL 502	Understanding the Business of Organizations	3
ODL 506	Social Factors and Cultural Diversity	3
ODL 507	Action Research in ODL: Capstone Project Preparation	3
ODL 508	Leadership for Practitioners	3
ODL 512	Small and Large Systems: Diagnosis and Change	3
ODL 515	Project Management and Strategic Thinking	3
ODL 516	Developing Systems Literacy: Organizational Workshop (T)	3
ODL 518	Ethical Effectiveness	3
ODL 519	Strategic Change: Planning for Organizational Success (T)	3
ODL 520	Appreciative Inquiry (T)	3
<b>Total Credit Units to Complete Electives</b>		<b>18</b>

**Total credits required for degree completion** . . . . . 36

(T) Indicates Turbo courses that are offered on two Friday/Saturday or Saturday/Sunday weekends.

Master of Science - Counseling and Clinical Health Psychology

GENERAL TRACK

*First Year*

TERM 1 (FALL)

Course No	Course Title	Credits
PSY 501	Theories of Personality	3
PSY 505	Clinical Assessment in Health Psychology	3
PSY 508	Developmental Psychology	3
<b>Total Credits</b>		<b>9</b>

TERM 2 (WINTER)

Course No	Course Title	Credits
PSY 503	Psychopathology	3
PSY 506	Foundations of Psychotherapy	3
PSY 552	Program Evaluation, Research Methods and Statistics	3
<b>Total Credits</b>		<b>9</b>

TERM 3 (SPRING)

Course No	Course Title	Credits
PSY 507	Social Psychology and Multicultural Competence	3
PSY 509	Tests and Measurements	3
PSY 510	Professional, Legal and Ethical Issues	3
<b>Total Credits</b>		<b>9</b>

Master of Science - Counseling and Clinical Health Psychology

**Second Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 504 . . . . .	Group Therapy . . . . .	3
<b>Total Credits</b> . . . . .		<b>3</b>

**TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 502 . . . . .	Behavioral Change in Health Psychology . . . . .	3
PSY 561 . . . . .	Practicum I . . . . .	3
<b>Total Credits</b> . . . . .		<b>6</b>

**TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 553 . . . . .	Clinical Health Psychology: Integrating Seminar . . . . .	3
PSY 562 . . . . .	Practicum II . . . . .	3
<b>Total Credits</b> . . . . .		<b>6</b>

**TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 563 . . . . .	Practicum III . . . . .	3
PSY 571 . . . . .	Career and Lifestyle Development . . . . .	3
<b>Total Credits</b> . . . . .		<b>6</b>

**Total credits required for degree completion . . . . . 48**

Master of Science - Counseling and Clinical Health Psychology

**ADDICTIONS AND OFFENDER COUNSELING TRACK**

***First Year***

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 501 . . . . .	Theories of Personality . . . . .	3
PSY 505 . . . . .	Clinical Assessment in Health Psychology . . . . .	3
PSY 508 . . . . .	Developmental Psychology . . . . .	3
	<b>Total Credits</b> . . . . .	<b>9</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 503 . . . . .	Psychopathology . . . . .	3
PSY 506 . . . . .	Foundations of Psychotherapy . . . . .	3
PSY 552 . . . . .	Program Evaluation, Research Methods and Statistics . . .	3
	<b>Total Credits</b> . . . . .	<b>9</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 507 . . . . .	Social Psychology and Multicultural Competence . . . .	3
PSY 509 . . . . .	Tests and Measurements . . . . .	3
PSY 510 . . . . .	Professional, Legal and Ethical Issues . . . . .	3
	<b>Total Credits</b> . . . . .	<b>9</b>



Master of Science in Counseling and Clinical Health Psychology

**ADDICTIONS AND OFFENDER COUNSELING TRACK**

**Second Year** Tentative Schedule - Order of courses may change

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 504	Group Therapy	3
<b>Total Credits</b>		<b>3</b>

**TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
HPSY 501	Neuropsychopharmacology of Substance Abuse	3
HPSY 504	Assessing and Treating Substance Use Disorders	3
PSY 561	Practicum I	3
<b>Total Credits</b>		<b>9</b>

**TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
HPSY 503	Psychology of Offenders and Offender Change	3
HPSY 505	Motivational Interviewing	3
PSY 562	Practicum II	3
<b>Total Credits</b>		<b>9</b>

**TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
HPSY 507	Addictions and Correctional Psychology: Integrating Seminar	3
PSY 563	Practicum III	3
PSY 571	Career and Lifestyle Development	3
<b>Total Credits</b>		<b>9</b>

**Third Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
HPSY 506	Child, Adolescent and Family Issues in Substance Use Disorders	3
<b>Total Credits</b>		<b>3</b>

**Total credits required for degree completion** . . . . . 60

## Certificate in Applied Analysis

### TERM 1 (FALL)

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 580 . . . . .	Basic Principles of Applied Behavior Analysis . . . . .	3
PSY 581 . . . . .	Behavioral Assessment and Functional Analysis of Behavior . . . . .	3
<b>Total Credits</b> . . . . .		<b>6</b>

### TERM 2 (WINTER)

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 582 . . . . .	Behavior Modification in Applied Settings . . . . .	3
PSY 583 . . . . .	Clinical Applications of Applied Behavioral Analysis . . . . .	3
<b>Total Credits</b> . . . . .		<b>6</b>

### TERM 2 (SPRING)

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
PSY 584 . . . . .	Integrating Seminar in Applied Behavioral Analysis . . . . .	3
<b>Total Credits</b> . . . . .		<b>3</b>

**Total credits required for completion of certificate . . . . . 15**

## Certificate of Advanced Graduate Studies

### TERM 1 (FALL)

Course No	Course Title	Credits
PSY 575 . . . . .	Cognitive Behavior Therapy* . . . . .	6
<b>Total Credits</b> . . . . .		<b>6</b>

### TERM 2 and 3 (WINTER & SPRING)

Course No	Course Title	Credits
. . . . .	Any two 3-credit PSY or HPSY course . . . . .	6
<b>Total Credits</b> . . . . .		<b>6</b>

**Total credits required for completion of certificate . . . . . 12**

\*This is a year long course.

## Master of Science - School Psychology (MS)

### **First Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 501	Professional School Psychology	2
SPSY 504	Developmental Psychology	3
<b>Total Credits</b>		<b>5</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 503	Introduction to Research and Data Analysis	3
SPSY 505	Tests and Measurements	3
<b>Total Credits</b>		<b>6</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 502	Theories of Personality	3
SPSY 503B	Introduction to Multicultural School Psychology Research Seminar	2
SPSY 506	Physiology, Health and Psychology	3
<b>Total Credits</b>		<b>8</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 507	The Exceptional Child: Psychological/ Educational Implications	3
SPSY 510	Learning: Theory and Application	3
SPSY 551	School Psychology Practicum Field Experience Seminar	2
<b>Total Credits</b>		<b>8</b>

### **Second Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 508	Foundation of Psychotherapy	3
SPSY 511	Curriculum Instruction and Educational Leadership	3
<b>Total Credits</b>		<b>6</b>

**Total credits required for degree completion** . . . . . 33

## Educational Specialist - School Psychology (EdS)

### **First Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 513	Assessment I: Cognitive Assessment	3
SPSY 514	Multicultural Issues in Psychology	3
<b>Total Credits</b>		<b>6</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 515	Assessment II: Psychoeducational Assessment of the Exceptional Learner	3
SPSY 521	Health Psychology and Medicine Applied to Schools	3
<b>Total Credits</b>		<b>6</b>

#### **TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 516	Educational Research and Program Evaluation	3
SPSY 518	Assessment III: Personality and Behavior	3
<b>Total Credits</b>		<b>6</b>

### **Second Year**

#### **TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 519	Consultation and Collaboration in Educational Settings	3
SPSY 552	Practicum Seminar in School Psychology I: Family-School Partnerships	2
<b>Total Credits</b>		<b>5</b>

#### **TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 517	Academic and Behavioral Interventions	3
SPSY 520	Effective Prevention and Crisis Intervention at Home and School	3
SPSY 553	Practicum Seminar in School Psychology II: School Structure and Organization	1
<b>Total Credits</b>		<b>7</b>

**Educational Specialist - School Psychology (EdS)**

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 509 . . . . .	Cognitive Behavioral Therapy in the Schools . . . . .	3
SPSY 554 . . . . .	Practicum Seminar in School Psychology III: Applied Law and Ethics . . . . .	3
<b>Total Credits</b> . . . . .		<b>6</b>

***Third Year***

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 561 . . . . .	School Psychology Internship Seminar I . . . . .	3
<b>Total Credits</b> . . . . .		<b>3</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 562 . . . . .	School Psychology Internship Seminar II . . . . .	3
<b>Total Credits</b> . . . . .		<b>3</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 563 . . . . .	School Psychology Internship Seminar III . . . . .	3
<b>Total Credits</b> . . . . .		<b>3</b>

**Total credits required for certification . . . . . 45**

Doctor of Psychology - School Psychology (PsyD)

**First Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 630	Psychometrics	3
<b>Total Credits</b>		<b>3</b>

**TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 631	Ethics and Professional Issues in Psychology	3
SPSY 636	Cognitive Behavior Therapy I	1
SPSY 691	Cognitive Affective Bases of Behavior	3
<b>Total Credits</b>		<b>7</b>

**TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 632	Developmental Psychopathology	3
SPSY 635	Advanced Assessment and Prevention/ Intervention	3
SPSY 635P	Practicum in Advanced Assessment and Prevention/Intervention	1
SPSY 637	Cognitive Behavior Therapy II	2
SPSY 681	Psychopharmacology	1
<b>Total Credits</b>		<b>10</b>

**TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 634	Multicultural Community School Psychology	3
SPSY 645	Issues in Supervision	1
SPSY 646	Physiological Bases of Behavior	3
<b>Total Credits</b>		<b>7</b>

Doctor of Psychology - School Psychology (PsyD)

**Second Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 640 . . . . .	Social Psychology and Group Process . . . . .	3
	Elective . . . . .	3
	<b>Total Credits</b> . . . . .	<b>6</b>

**TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 641 . . . . .	Applied School Neuropsychology . . . . .	3 or
SPSY 682 . . . . .	Group and Family Therapy with Children and Adolescents . . . . .	3
SPSY 644 . . . . .	Consultation in Home, School and Community Settings . . . . .	2
SPSY 683 . . . . .	Research I: Design and Methods . . . . .	3
	<b>Total Credits</b> . . . . .	<b>8</b>

**TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 638 . . . . .	Cognitive Behavior Therapy III: Practicum . . . . .	2 or
SPSY 641P . . . . .	Applied School Neuropsychology Practicum . . . . .	2
SPSY 684 . . . . .	Research II: Statistics . . . . .	3
	<b>Total Credits</b> . . . . .	<b>5</b>

**TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 633 . . . . .	History and Systems . . . . .	3
SPSY 685 . . . . .	Research III: Dissertation in School Psychology . . . . .	3
	<b>Total Credits</b> . . . . .	<b>6</b>



Doctor of Psychology - School Psychology (PsyD)

**Third Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 600 . . . . .	Introduction to Internship Seminar . . . . .	0
<b>Total Credits</b> . . . . .		<b>0</b>

**TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 686 . . . . .	Internship Seminar I . . . . .	1
SPSY 690 . . . . .	Dissertation Seminar . . . . .	2
<b>Total Credits</b> . . . . .		<b>3</b>

**TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 687 . . . . .	Internship Seminar II . . . . .	1
SPSY 690 . . . . .	Dissertation Seminar . . . . .	2
<b>Total Credits</b> . . . . .		<b>3</b>

**TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 688 . . . . .	Internship Seminar III . . . . .	1
SPSY 690 . . . . .	Dissertation Seminar . . . . .	2
<b>Total Credits</b> . . . . .		<b>3</b>

After the third year, if Dissertation has not been defended, students are required to register each term for SPSY 692 Dissertation for one credit.

Doctor of Psychology - School Psychology (PsyD)

**Fourth Year**

**TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
SPSY 601 . . . . .	Internship . . . . .	0
<b>Total Credits . . . . .</b>		<b>0</b>

**Total credits required for degree completion . . . . . 61**

- 1) There will be no charge when registering for the zero credit of internship. At that time students are not eligible to receive financial aid.
- 2) Students who register concurrently each term for one credit of internship and two credits of Dissertation Seminar will be charged for three credits.
- 3) Students who register concurrently each term for one credit of internship and one credit of Dissertation will have the fee waived for one of these credits.
- 4) Students who register only for the one credit internship will be charged.

Doctor of Psychology - Clinical Psychology (PsyD)

**First Year**

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 601	Learning Theories	3
CPSY 603	Behavioral Medicine	3
CPSY 622	Ethics in Psychology	3
<b>Total Credits</b>		<b>9</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 608	Social Psychology	3
CPSY 616	Lifespan Development	3
CPSY 624	Research I: Research Design and Methodology	3
<b>Total Credits</b>		<b>9</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 620	Psychopathology	3
CPSY 623	Human Diversity: Multiculturalism and Individual Differences	3
CPSY 625	Research II: Psychometrics and Univariate/Multivariate Statistics and Lab	4
<b>Total Credits</b>		<b>10</b>

**Total credits for first year** ..... 28

Doctor of Psychology - Clinical Psychology

**Second Year**

**TERM 1 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 626	Assessment I: Assessment of Cognitive Abilities	3
CPSY 629	Physiological Bases of Behavior	3
CPSY 630	Cognitive Therapy	3
<b>Total Credits</b>		<b>9</b>

**TERM 2 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 627	Assessment II: Objective Personality Assessment	3
CPSY 662	Behavior Therapy	3
<b>Total Credits</b>		<b>6</b>

**TERM 3 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 607	Cognitive/Affective Bases of Behavior	3
CPSY 628	Assessment III: Projective Assessment	3
<b>Total Credits</b>		<b>6</b>

**Total credits for second year** . . . . . **21**

## Doctor of Psychology - Clinical Psychology

### **Third Year**

#### **TERM 1 (SUMMER)**

##### **Objective and Essay Comprehensive Examinations**

A student must register in the term that any portion of the comprehensive examination is taken. No course credit is given. A 0.5 credit fee is assessed for each part of the exam.

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 652	Practicum I	1.5
CPSY 681	Essay Comprehensive Exam	not for credit
CPSY 682	Objective Comprehensive Exam	not for credit
<b>Total Credits</b>		<b>1.5</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 605	History and Systems of Psychology	3
CPSY 653	Practicum II	1.5
CPSY 674	Research III: Dissertation Development Seminar	3
<b>Total Credits</b>		<b>7.5</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 654	Practicum III	1.5
CPSY 674A	Research IV: Methodology Development and Statistical Planning	3
<b>Total Credits</b>		<b>4.5</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 655	Practicum IV	1.5
CPSY 661	Administration, Consultation and Supervision of Behavioral Health Care	3
CPSY 674B	Research V: Manuscript Development and Defense Planning; Dissertation Advisement	3
<b>Total Credits</b>		<b>7.5</b>

**Total credits for third year** ..... **21**

## Doctor of Psychology - Clinical Psychology

### **Fourth Year**

#### **TERM 1 (SUMMER)**

##### **STEPPS COMPREHENSIVE EXAM**

A STEPPS examination fee will be assessed through the Clinical Learning and Assessment Center. No course credit is given.

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 675	Dissertation Advisement	1
CPSY 683	STEPPS Comprehensive Exam	not for credit
CPSY 710	Practicum V	1.5
<b>Total Credits</b>		<b>2.5</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 675	Dissertation Advisement	1
CPSY 711	Practicum VI	1.5
	Elective	3
<b>Total Credits</b>		<b>5.5</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 675	Dissertation Advisement	1
CPSY 712	Practicum VII	1.5
	Elective	3
<b>Total Credits</b>		<b>5.5</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 675	Dissertation Advisement	1
CPSY 713	Practicum VIII	1.5
	Elective	3
<b>Total Credits</b>		<b>5.5</b>

**Total credits for fourth year** . . . . . **19**

## Doctor of Psychology - Clinical Psychology

### **Fifth Year**

#### **TERM 1 (SUMMER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 667	Internship	1
CPSY 675	Dissertation Advisement	1
<b>Total Credits</b>		<b>2*</b>

#### **TERM 2 (FALL)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 667	Internship	1
CPSY 675	Dissertation Advisement	1
<b>Total Credits</b>		<b>2*</b>

#### **TERM 3 (WINTER)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 667	Internship	1
CPSY 675	Dissertation Advisement	1
<b>Total Credits</b>		<b>2*</b>

#### **TERM 4 (SPRING)**

<b>Course No</b>	<b>Course Title</b>	<b>Credits</b>
CPSY 667	Internship	1
CPSY 675	Dissertation Advisement	1
<b>Total Credits</b>		<b>2*</b>

**Total credits required for degree completion . . . . . 89**

\*Internship and Dissertation credits (beyond the 9 credits for seminar) do not count toward the minimum of 89 credits for degree requirements.

Credits for years five through eight (see #3 below)

- 1) Students must complete a total of 9 credit hours of electives, to be taken after the completion of the first two years of core courses.
- 2) Following the completion of 9 credit hours of research, which includes Research III, IV, V, students must register for one credit Dissertation Advisement each term until thesis is successfully defended.
- 3) Students who register concurrently each term for one credit of internship and dissertation will have the fee waived for one of these credits. This is done only after the 9 credits of dissertation seminar are completed.

Please note that this is only a sample plan. The College reserves the right to change course sequencing.

Post-Doctoral Certificates - Clinical Health Psychology and Clinical Neuropsychology

Clinical Health Psychology Certificate

**First Year**

**TERM 1 (FALL)**

Course No	Course Title	Credits
CPSY 803	Advanced Ethics, Health Policy, and Multicultural Competency in Medical Settings	3
CPSY 820	Behavioral and Health Psychology Assessment	3
CPSY 850	Clinical Placement - Clinical Health Psychology *	1
<b>Total Credits</b>		<b>7</b>

**TERM 2 (WINTER)**

Course No	Course Title	Credits
CPSY 850	Clinical Placement - Clinical Health Psychology * Therapy Elective selected from several options and approved by program director	1 3
<b>Total Credits</b>		<b>4</b>

**TERM 3 (SPRING)**

Course No	Course Title	Credits
CPSY 850	Clinical Placement - Clinical Health Psychology * Therapy Elective selected from several options and approved by program director	1 3
<b>Total Credits</b>		<b>4</b>

**TERM 4 (SUMMER)**

A STEPPS examination fee will be assessed through the Clinical Learning and Assessment Center. No course credit is given.

Course No	Course Title	Credits
CPSY 850	Clinical Placement - Clinical Health Psychology * Professional Evaluation (STEPPS)	1 not for credit
<b>Total Credits</b>		<b>1</b>

**Total credits for year** . . . . . **16**

\*Practicum (10-16 on-site hours per week with group supervision plus practicum course).



Post-Doctoral Certificates - Clinical Health Psychology & Clinical Neuropsychology

Clinical Neuropsychology Certificate

**First Year**

**TERM 1 (FALL)**

Course No	Course Title	Credits
CPSY 802	Clinical Foundations of Neuropsychology	3
CPSY 803	Advanced Ethics, Health Policy, and Multicultural Competency in Medical Settings	3
CPSY 860	Clinical Placement - Clinical Neuropsychology*	1
<b>Total Credits</b>		<b>7</b>

**TERM 2 (WINTER)**

Course No	Course Title	Credits
CPSY 648	Neuropsychological Assessment	3
CPSY 804	Traumatic and Degenerative Brain Disorders	3
CPSY 860	Clinical Placement - Clinical Neuropsychology*	1
<b>Total Credits</b>		<b>7</b>

**TERM 3 (SPRING)**

Course No	Course Title	Credits
CPSY 805	Cognitive Habilitation and Rehabilitation	3
CPSY 860	Clinical Placement - Clinical Neuropsychology*	1
<b>Total Credits</b>		<b>4</b>

**TERM 4 (SUMMER)**

A STEPPS examination fee will be assessed through the Clinical Learning and Assessment Center. No course credit is given.

Course No	Course Title	Credits
CPSY 860	Clinical Placement - Clinical Neuropsychology *	1
	Professional Evaluation (STEPPS)	not for credit
<b>Total Credits</b>		<b>1</b>

**Total credits for year** . . . . . **19**

\*Practicum (10-16 on-site hours per week with group supervision plus practicum course).

## **PROGRAM AND COURSE DESCRIPTIONS**

### **Doctor of Osteopathic Medicine (DO) – Philadelphia Campus**

#### **DO 111 – Structural Principles of Osteopathic Medicine – (SPOM)**

##### **13 credits**

##### **– Gross Anatomy Unit**

Laboratory dissection of the human body in a systematic manner using a regional approach; augmented by use of models, plastinated prosections; the Cathie Collection of human specimens, radiological films, video tapes of human dissection, computer aided instruction and real-time prosections; application of clinical anatomy made in student led clinical correlation assignments.

##### **– Developmental Anatomy Unit**

Normal human development; abnormal development of clinical importance to understand congenital anomalies; correlation with gross anatomy unit.

##### **– Histology Unit**

Recognize normal structure and function of cells, tissues and organs through use of microscopic images; conferences utilize a clinical case format to underscore basic science and clinical concepts; essential knowledge leading to the understanding of and recognition of pathological conditions.

##### **– Radiographic Anatomy Unit**

Normal radiographic anatomy correlated with gross and developmental anatomy. Emphasis is on normal and developmental roentgen anatomy as it relates to clinical medicine; introduction to terminology and application of contemporary imaging methods, CT and MRI.

#### **DO 121 – Cellular and Molecular Basis of Medicine**

##### **14 credits**

Review normal cellular structure and function; perturbations of normal cellular and organ function; introduction to neoplastic diseases, carcinogenesis, tumor cell biology; diagnosis, staging and management of cancer, emphasis on hematology oncology; blood and blood-related diseases such as clotting and hematopoietic disorders; normal metabolic processes contrasted with perturbations, e.g., diabetes, arthritis, cystic fibrosis. Cellular injury induced by physical, chemical and microbial entities. Immune response; host-parasite relationship with discussions of microbial pathogenicity, infectious disease, acute and chronic inflammation with emphasis on rheumatic diseases. Introduction to pharmacologic intervention; principles of clinical pharmacology; drugs' alteration of inflammatory and immune processes; antimicrobial medications. Clinical case conferences underscore basic and clinical concepts; laboratory sessions provide direct microscopic observation of normal eucaryotic and microbial cells and an introduction to commonly used diagnostic techniques in infectious disease; clinical correlations are structured as live interactive sessions between students, a primary care physician and people living with disease.

## **DO 133 – Emergency Medicine I**

### **1 credit**

Basic Cardiac Life Support under American Heart Association standards and pre-hospital first responder skills; patient assessment in the pre-hospital environment; use of the automated external defibrillator (AED); upon successful completion, American Heart Association Healthcare Provider Course Card awarded.

## **DO 134 – Cardiovascular, Renal and Pulmonary Medicine**

### **12 credits**

(formerly DO 131 and DO 132)

#### **– Cardiovascular Unit**

Fundamentals of clinical cardiology; cardiac muscle function and circulation; cardiac cycle, heart sounds, clinical diagnosis of findings suggestive of underlying heart disease; arrhythmias both atrial and ventricular, commonly encountered organic heart disease – acquired, congenital, hereditary and infectious; implications of peripheral vascular disease; cardiac pathology and circulatory disorders; related pharmacology – antihypertensives, hypolipidemics, antiarrhythmic and diuretics.

#### **– Renal and Pulmonary Unit**

Etiology, diagnosis and treatment of the diseases of the renal and respiratory systems; physiology and pathophysiology of respiration and a wide variety of lung diseases from emphysema to carcinoma; pharmacology of antihistamines, anti-inflammatory agents, bronchodilator, mucolytic and antitussive agents; risk factors and management related to renal and pulmonary disorders, including occupational hazards; physiologic, pathophysiologic, and pharmacologic relation of cardiovascular, renal, and respiratory systems emphasized.

## **DO 138A – Preventive and Community-Based Medicine I**

### **1 credit**

(formerly Medicine and Society I)

First of a four part sequence introducing students to ethical principles applied to the patient encounter; in decision-making; and communication. Examples used – palliative care, obstetrics-gynecology, surgery. Concepts in epidemiology and public health related to disease presentation, prevention, reporting. Evidence-based medicine discusses basic methods in acquiring, approaching and appraising information to be used in patient care.

## **DO 139A, 139B, 139C – Osteopathic Principles and Practice I, II, III**

### **2 credits each term**

#### **Total credits 6**

Introduction to concepts and philosophy of osteopathic medicine; fundamentals in the art of clinical patient observation, palpation and evaluation; surface anatomical landmarks identified as foundation for future coursework in manual medicine as well as for primary care skills; physiologic motions of spine; clinical evaluation skills in active and passive motion; regional and intersegmental motion testing. Somatic dysfunction defined. Common musculoskeletal patient

complaints, their osteopathic diagnosis and management; therapeutic skill development of soft-tissue, myofascial release and counterstrain osteopathic manipulative treatments (OMT); differentiating the basis for myofascial techniques and reflex-oriented techniques; physiologic motion of the thoracic spine and rib cage as well as the biomechanical actions of the respiratory muscles; thoracic and costal somatic dysfunction clinical cases; scoliosis defined, osteopathic management of various scoliosis types; regional muscle energy and HVLA; introduction to viscerosomatic, somatic-visceral, somatic-somatic, and psychosomatic reflexes and their relevance to health and disease; pain and referred pain implications and management.

### **DO 140A, 140B, 140C – Primary Care Skills I, II, III**

**1 credit each term**

**Total credits 3**

Fundamental techniques of physical examination and patient interviewing are correlated with knowledge of anatomy, osteopathic manipulative medicine, and cell and tissue. The medical history is introduced; concepts of osteopathic approach to primary care; psychosocial issues and the physician-patient relationship. Clinical workshops, small group case discussions and standardized patient actors are used to teach and evaluate skill acquisition.

### **DO 212 – Gastroenterological Sciences**

**5 credits**

Physiology and pathophysiology of the gastrointestinal system; common diseases of the gastrointestinal system, biliary tract; disorders of metabolism, and infections and infestations of the liver and GI tract; interpretation of imaging methods such as gastrointestinal endoscopy and colonoscopy; GI and adnexa oncology including surgical, medical and radiation treatment.

### **DO 213 – Reproductive Genitourinary and Obstetrics, Gynecologic Medicine**

**8 credits**

Reproductive biology of both genders and pathophysiological conditions affecting each; genitourinary region of both genders especially lower urinary tract diseases; common disease processes, malformations and infectious processes. Mechanisms and consequences of sexually transmitted disease emphasizing issues in public health. Normal pregnancy, labor and puerperium; pathology related to pregnancy, diagnostic methods and treatment; non-surgical gynecological diseases; diagnostic and operative gynecology; gynecologic oncology. Behavioral and social issues related to sexuality; family planning; contraception; infertility.

### **DO 221 – Clinical Endocrinology**

**3 credits**

Pathophysiology and clinical manifestation of the endocrine disorders emphasized; pituitary, thyroid, parathyroid and adrenal glands reviewed; diseases of the endocrine glands, including metabolic disorders and vitamin and nutritional disturbances.

## **DO 222 – Clinical and Basic Neuroscience**

### **13 credits**

Clinical and Basic Neuroscience coordinates all disciplines related to the central nervous system.

Comprehensive course on the central nervous system integrating neuroscience, neurology, psychiatry, neurosurgery, neuropathology, neuropharmacology, and physical medicine and rehabilitation; structure and function of the brain and spinal cord and their role in normal and diseased body systems; laboratory macro-dissection and demonstration of human brain and spinal cord; blood supply; contemporary imaging procedures of head and spine. Neurologic history and neurologic physical examination; common diseases of brain, spinal cord, peripheral nerves and neuromuscular system; ischemic and hemorrhagic diseases; demyelination disorders, infectious diseases; trauma; neuropathology of aging and Alzheimer's disease. Surgical interventions; craniocerebral trauma; spinal cord injury; hydrocephalus/NPH, peripheral nerve disorders and brain tumors. Neurosurgical management of pain is coordinated with other approaches to and perspectives on pain in the primary care setting.

#### **– Psychiatry Unit**

Introduction of psychiatry and behavioral medicine with implications for the generalist physician; history and evolution of practice of psychiatry; prominent theories of mind and common causes of emotional illness; evaluation of psychiatrically ill patient and principles of diagnosis; the evidence of neurobiological basis of psychiatric disease emphasized; special topics are discussed including substance abuse disorders, child and adolescent psychiatry, geriatric psychiatry, principles of psychosomatic medicine and psychiatric emergencies. Pharmacologic basis of treatment and precautions; antipsychotics, muscle relaxants; antidepressants; anticonvulsants, sedatives, endogenous opioids, therapeutic uses of narcotics, psychomotor stimulants and psychomimetics; pharmacologic agents and their use in Parkinsonism, anxiety disorders, depression and psychosis; pharmacologic basis of addiction; special session included discussing the impaired physician. Pain and pain management; anesthetics, including general, local and narcotic; emotional overtones of pain; relation to addiction; narcotic intervention use and precautions.

## **DO 224 – Rheumatic Disease**

### **1 credit**

Discussions on diagnosis and therapy of clinical problems involving joints, soft tissues and the allied conditions of connective tissues; advancements in immunologic concepts related to these disorders; pathogenesis of major rheumatological disorder is described in terms of the autoimmune system, and autoimmune disease concepts. Emphasis is given to evidence-based medical treatment of rheumatological disorders.

## **DO 231 – General Surgery**

### **3 credits**

Introduction to patient work-up in clinical setting; “thinking clinically”; surgical skills – sterile technique, gloving/gowning, suture technique, and preoperative and postoperative care. Application of contemporary literacy methods and resources available that assist physicians in patient care optimizing outcome. Team work in the clinical work force; making the transformation from classroom to clinic; Henwood Lecture series – special topics in general surgery; selected topics in fundamental orthopedics and reconstructive surgery.

## **DO 232 – Dermatology**

### **1 credit**

Diagnosis and management of cutaneous diseases in the primary care setting; common eruptive diseases; visual training in recognition of common characteristics and variations; use of topical therapy, prescription writing, and special diagnostic and therapeutic procedures; skin manifestations of systemic disorders reviewed.

## **DO 233 – Life Stages: Clinical Geriatrics and Pediatrics**

### **4 credits**

#### **– Clinical Geriatrics**

Understanding the unique and complex medical aspects of older persons; clinical syndromes commonly seen in older persons emphasizing the five “I”s: impaired homeostasis, incompetence, incontinence, immobility and iatrogenesis; physiologic changes associated with aging; healthy aging; maintenance of function and nutrition; medico-legal and ethical issues; end-of-life issues – pain management, hospice, terminal care, anticipatory planning and advance directives.

#### **– Pediatrics**

Normal development and evaluation; fetus; high-risk pregnancies; premature and newborn high-risk problems; difficulties affecting perinatal care of premature and full-term infants. Preventive pediatrics (hygiene, infant feeding and immunizations) in ambulatory office practice; hospital critical. Childhood gastrointestinal, surgical, hematologic, nose and throat, and cardiovascular problems; other disease processes and influences on fetus, newborn and general pediatric population. Fluid and electrolyte balance; emergency room care, medical aspects of trauma, fever and convulsions, the unconscious child, metabolic problems; enuresis, medical genitourinary disease and central nervous system problems – attention to developmental, neurological and behavioral pediatrics.

## **DO 235 – Emergency Medicine II**

### **1 credit**

Small group discussions and evaluation of case-based scenarios in the emergency setting; common emergencies review organ systems and clinical response to emergent conditions; student-led discussion with faculty facilitation.

## **DO 236 – Eyes, Ears, Nose and Throat (EENT)**

### **1 credit**

Common disorders and injuries to eyes, visual system, ears, auditory system, head and neck; includes review of regions and pathology; differential diagnostic and treatment patterns including surgical intervention; plastic and reconstructive surgery following trauma.

## **DO 238A, 238B, 238C – Preventive and Community-Based Medicine II, III, IV** **.5 credits for two terms and 1 credit in third term**

### **Total credits 2**

(formerly Medicine and Society II, III, IV)

Continuation of the four part sequence providing students information on ethical principles applied to the patient encounter; in decision-making; and communication. Examples used – palliative care, obstetrics-gynecology, surgery. Concepts in epidemiology and public health related to disease presentation, prevention, reporting. Evidence-based medicine discusses basic methods in acquiring, approaching and appraising information to be used in patient care.

## **DO 239A, 239B, 239C – Osteopathic Principles and Practice IV, V, VI**

### **2 credits each term**

### **Total credits 6**

Pelvic and lumbar reviewed; physiologic motion patterns; sacral, lumbar and pelvic somatic dysfunctions; OMT (muscle energy and HVLA) for these dysfunctions; somatic and visceral relationships that pertain to abdomen, sacrum, and pelvis with clinical correlation in reproductive, obstetric-gynecologic, gastrointestinal, and urogenital disorders. Introduction to osteopathic principles in the cranial field is explored (an elective is offered in the third trimester for more complete understanding and practical palpatory diagnosis). Cervical biomechanics and somatic dysfunction reviewed; muscle energy, HVLA, counterstrain and FPR techniques related to limbs, shoulders and hips.

## **DO 240A, 240B, 240C – Primary Care Skills IV, V, VI**

### **1 credit each term**

### **Total credits 3**

Advanced physical examination skills, minor-surgical skills and problem solving. Ophthalmologic and ENT examinations in the outpatient setting; advanced clinical workshops, case presentations and standardized patient exercises are integrated with second-year medical course content. Small-group laboratory instruction in general surgical skills includes sessions on surgical scrub and sterile technique, gloving and gowning, suturing, phlebotomy, IV and catheterization. Standardized patient OSCE-type evaluation is included.

## **DO 311 – Medical Law**

### **2 credits**

Legal obligations and ethical responsibilities of physicians, both professionally and personally; medicolegal issues such as judicial process, fraud and abuse, malpractice, torts, patient rights and privacy issues; issues related to HIPPA and

compliance; online course and evaluation; begins anytime during the second year; HIPPA module satisfactory completion required to begin clinical clerkships; entire course including the online assessments must be completed by the end of the third year.

**Non-Credit Advanced Cardiac Life Support – Third Year Medical**

American Heart Association ACLS course; two-day; offered at the end of the radiology clerkship. Students are awarded the AHA ACLS course card, valid for two years, upon successful completion. This is required for graduation.



## Doctor of Osteopathic Medicine (DO) – Georgia Campus

### **DO 111G – Structural Principles of Osteopathic Medicine**

#### **13 credits**

This is a 13-week course that covers several human anatomical sciences (i.e., developmental anatomy, gross anatomy, and microscopic anatomy). Introductory content for each anatomical science will be learned during the first week from both a regional and system perspective. An understanding of foundational material for each anatomical science is requisite for learning subsequent course content.

From week two to the end, the anatomical sciences will be studied and learned by regions in gross anatomy, and by the corresponding system(s) in developmental and microscopic anatomy. This approach integrates the learning of the anatomical sciences with clinically oriented discussion to illustrate the significance of these sciences to the profession of medicine. For example, students will first learn about the origin of the muscular, skeletal and nervous systems in developmental anatomy before studying and observing the adult structures of the back region in the gross anatomy laboratory. Subsequently, students will learn what the muscles, bones, and nerves of the back region look like and how they work at the cell and tissue levels in microscopic anatomy. Knowledge and comprehension of “normal” structure and function is required before evaluating and solving “abnormal” structure and function in a more clinical context.

Lectures that incorporate active learning strategies will be used to cover the anatomical sciences. During lectures, students will learn how to apply their anatomical knowledge to patient problems, using clinical vignettes and medical images of anatomical structures. Microscopic anatomy will be learned via digital images during lecture. Reading assignments from required anatomy texts will reinforce, clarify and extend upon lectures.

Gross anatomy laboratories are scheduled to follow corresponding lecture content. X-rays, CT scans and MRI images as well as bones will be available for students to study. Clinical faculty will be available during laboratories to help students learn the clinical relevance of the anatomical sciences. The Clinical Anatomical Correlations portion of the course provides the student with an understanding of the relevance of anatomical sciences to clinical conditions through the presentations, clinical cases, student presentations, and clinical faculty discussions with basic science faculty.

### **DO 121G – Cellular and Molecular Basis of Medicine**

#### **14 credits**

This course introduces students to the study of disease. Course goals include providing students with a broad, fundamental knowledge background in molecular biology, genetics, medical biochemistry, microbiology, immunology, pathology and pharmacology. Disease states receiving particular attention

include genetic disease, nutritional disease, hematological diseases, infection, autoimmunity, cancer and immune suppression. The basic science foundation necessary to comprehend these disease states is laid in this course. Students will begin to practice self-directed learning, and improve their communication skills by participating in group discussions. Students will also gain an appreciation for basic and clinical research in fundamental biomedical topics through required presentations.

### **DO 130G – Basic and Clinical Neurosciences**

#### **14 credits**

Basic and Clinical Neurosciences is a multidisciplinary course covering the structure and function of the nervous system, with the greatest emphasis on the central nervous system. The course is an integration of various disciplines including medicine, surgery, radiology, pathology, immunology and microbiology, physiology and pharmacology. This course will present the regional and systems neuroanatomy, in addition to the physiology, embryology and histology of neural systems. Neuropathology, neuroimmunology and neuropharmacology are covered. The etiology, clinical presentation, diagnosis and treatment of neurologic and neuromuscular diseases are presented by clinicians. Clinical topics include stroke, hemorrhage, trauma, seizures, headaches, demyelinating diseases, dementia, delirium and neuromuscular diseases. Principles and practice of rehabilitation of patients with stroke, spinal cord and head trauma and neuromuscular diseases are presented.

Aspects of pain management including general and local anesthesia, and narcotic and non-narcotic pain relievers are presented. Case discussions complement lectures and allow students to practice self-directed learning, and improve their communication skills. Students also gain an appreciation for basic and clinical research in biomedical topics through required presentations.

### **DO 133G – Emergency Medicine I**

#### **1 credit**

All students are trained in Basic Cardiac Life Support under American Heart Association standards and prehospital first responder skills. Emphasis is placed on teaching patient assessment in the prehospital environment, including use of the automated external defibrillator (AED). Students are awarded the American Heart Association Healthcare Provider Course Card upon successful completion.

### **DO 134G – Cardiovascular, Pulmonary and Renal Medicine**

#### **12 credits**

Cardiovascular, Pulmonary and Renal Medicine is a multidisciplinary integrated course designed to take the student in an introductory manner through the specific physiologic and pharmacologic mechanisms, pathologic descriptions, pharmacologic interventions and applications, diagnostic specifics, therapeutic strategies and other relevant medical issues of each system and the crossover issues between systems. This course links the anatomy of the three systems to an integrated presentation of physiology, microbiology, pathology, pharmacology,

imaging and general medicine of each of the systems as well as cross system complications. Clinical scenarios are presented in order to provide examples that allow the students to draw connections between basic science mechanism and clinical application. Emphasis is placed on the understanding of how structural aberration results in functional change and the recognition of how symptoms are indicative of positive (system compensation) and negative (pathological) functional change. Students are expected to apply their basic knowledge of each system to develop an understanding of how a pathological process affecting one of the three systems can and will eventually create pathological processes in the other two.

## **DO 138AG, 138BG, 138CG – Preventive and Community-Based Medicine I, II and III**

**1 credit each term**

**Total 3 credits**

This course focuses on the critical components of physician responsibility and advocacy in the development and delivery of health care systems in the U.S. An epidemiological approach is implemented to study the historical influences that have led the current health care system to a state of crisis. The critical need for physician advocacy within the context of socio-cultural, economic, marketing and political competence will be explored. Concepts and strategies from epidemiology, including bio-statistical analysis of current research studies, will be applied to real case studies of community issues relevant to physician responsibilities. Current medico-legal, ethical and political issues will be studied in terms of options for physician advocacy and responsibility to the community.

## **DO 139AG – Osteopathic Principles and Practice I**

**2 credits**

Students are introduced to the concept and philosophy of the osteopathic school of the healing arts in lectures and practice sessions. Fundamentals in the art of observation, palpation and evaluation are presented. Practice session sheets are furnished for both instruction and recording of findings. Surface anatomy is studied and landmarks identified to lay a proper foundation for future work in this department as well as for physical diagnosis. Physiologic motions of the spine are considered in both lecture and practice sessions. Tests for active and passive motion are presented and carried out in practice sessions. Regional and intersegmental motion testing is applied. Somatic dysfunction is defined.

## **DO 139BG – Osteopathic Principles and Practice II**

**2 credits**

Clinical presentations and their osteopathic diagnosis and management are introduced. Further osteopathic fundamentals are presented in differentiating the basis for myofascial techniques and reflex-oriented techniques. Myofascial-oriented osteopathic techniques are demonstrated and students will begin their therapeutic development with softtissue, myofascial release and counterstrain osteopathic manipulative treatments (OMT).

## **DO 139CG – Osteopathic Principles and Practice III**

### **2 credits**

Physiologic motion of the thoracic spine and rib cage is reviewed, as well as the biomechanical actions of the respiratory muscles. Thoracic and costal somatic dysfunctions are presented in clinical cases. Scoliosis is defined and osteopathic management of various scoliosis types is covered. Muscle energy and HVLA techniques for this region are introduced. Introduction to viscerosomatic, somatovisceral, somatosomatic and psychosomatic reflexes and their relevance to health and disease are presented.

## **DO 140AG, 140BG, 140CG – Primary Care Skills I, II, III**

### **2 credits each term**

#### **Total 6 credits**

This course integrates with material presented in anatomy, osteopathic manipulative medicine, biochemistry, physiology and microbiology and clinical sciences to introduce fundamental techniques of physical examination and patient interviewing. The medical history is introduced, as are concepts in the osteopathic approach to primary care, psychosocial issues and the physician/patient relationship. The course includes an introduction to human sexuality and expands beyond the basics of physical examination skills training to address in more depth, clinical areas such as the cardiovascular, respiratory and neurologic systems. The department utilizes skill workshops, lectures, small group case discussions, standardized patient actors and the simulation model “Stan” in the instructional program.

## **DO 211G – Basic and Clinical Endocrinology**

### **3 credits**

The endocrine unit is an integration of various disciplines including physiology, pharmacology medicine, pathology and radiology. Lectures begin with a review of basic endocrine physiology, histology and embryology. Clinical lectures cover disorders of the pancreas, thyroid, parathyroids, adrenal glands and male reproductive organs. Students also work in groups on endocrine case(s) that build on previous knowledge to diagnose and manage a multisystem disease.

## **DO 212G – Gastroenterology**

### **4 credits**

In the GI course, the basic pathophysiology of the gastrointestinal system is presented. Clinical lecturers present a compendium of diseases of the gastrointestinal system, including the common and uncommon gastrointestinal conditions, biliary metabolism, and infections and infestations of the liver and gut. Surgical and pharmacological management of gastrointestinal diseases is also considered.

## **DO 213G – Reproductive and Genitourinary Sciences**

### **6 credits**

In the reproductive/genitourinary course, a review of human reproductive physiology is followed by lectures on pathophysiology of surgical and non-surgical gynecological diseases. Lectures on the progress and management of

normal pregnancy are presented. The management of the various presentations and mechanisms of labor is stressed. This is followed by studies of the pathology of pregnancy, diagnostic methods and treatment. Lectures and demonstrations of the diagnostic and operative gynecology procedures are also presented. Family planning, contraception, infertility and gynecologic oncology complete the course. The oncology and pharmacology associated with women's health issues are also presented.

### **DO 214G – Musculoskeletal/Skin**

#### **4 credits**

This course covers the clinical areas of orthopedics, rheumatology and dermatology as well as the pathology of diseases of the bones, joints and muscles. The pathology of leukemias and lymphomas is also discussed in this course. Basic skills and academic knowledge in orthopedics are presented to aid clerkship students in the evaluation of routine orthopedic problems. Emphasis is placed on the diagnosis and treatment of common disorders of the neck, spine, shoulders, hips and extremities. The rheumatology lectures cover inflammatory diseases of joints and connective tissues. Etiology, presentation, differential diagnosis and treatment are stressed. The dermatology lectures prepare the student for diagnosis and management of routine cutaneous diseases.

### **DO 215G – Psychiatry**

#### **2 credits**

The psychiatry/neuropharmacology course begins with the history and evolution of psychiatry and the prominent theories of the mind and the causes of emotional illness. Evaluation of the psychiatrically ill patient and principles of psychiatric diagnosis are taught. The neurobiological basis of psychiatric disease and its treatment is discussed in detail. The relationship between brain function and psychiatric illness is a continuing discussion throughout this unit. The diagnosis and principles of treatment of the major psychiatric syndromes are presented in detail. The course continues further into the field of neuropsychiatry. Many special topics are presented, including substance abuse disorders, child and adolescent psychiatry, geriatric psychiatry, principles of psychosomatic medicine and psychiatric emergencies.

### **DO 232G – Surgery, Ophthalmology, ENT**

#### **2 credits**

##### **– Surgery Unit**

Lectures and demonstrations deal with an introduction to surgical skills including sterile technique, suture technique, surgical diagnosis, and peri-operative care. Osteopathic principles used in diagnosis and management in surgical disease states are reviewed. Suturing and gloving/gowning skills are taught in practical sessions. Clinical lectures use case presentations to integrate surgical procedures in disease management.

##### **– Ophthalmology/ENT Unit**

This unit emphasizes a clinical approach of diagnosis and treatment of common

disorders of the eyes, ears, nose and throat. Didactic lectures and case presentations cover common disorders and injuries to eyes, visual system, ears, auditory system, head and neck stressing differential diagnostic and treatment options including surgical intervention.

### **DO 233G – Life Stages: Geriatrics and Pediatrics**

#### **2 credits**

This course concentrates on disease presentations of particular importance in the pediatric and geriatric populations. The pediatrics unit emphasizes the normal development and care of the pediatric patient. Topics covered include an introduction to the pediatric history and physical, developmental milestones, ante-natal considerations, routine child care including vaccination schedules, hyperbilirubinemia syndromes, pediatric meningitis and sepsis, SIDS, fluid and electrolyte balance, respiratory problems, seizures, obesity and child abuse. Coverage of other neonatal and childhood diseases, disorders and trauma occurs in a variety of other courses during the first and second year.

In the geriatric unit, students are encouraged to build on their basic science knowledge and gain a deeper understanding of the unique and complex medical aspects of older persons. Course format utilizes lectures and case studies to introduce the clinical syndromes commonly seen in older persons, including the five “I”s: impaired homeostasis, incompetence, incontinence, immobility and iatrogenesis. Physiologic changes associated with aging, healthy aging, maintenance of function and nutrition, as well as medicolegal and ethical issues, are discussed. The course culminates in a discussion of end of life issues such as pain management, hospice, terminal care, anticipatory planning and advance directives.

### **DO 235G – Emergency Medicine II**

#### **2 credits**

This course covers typical situations encountered in the specialty of emergency medicine. Cardiac, upper airway, traumatic, toxicological, neurologic, musculoskeletal and pediatric emergencies are covered.

### **DO 239AG – Osteopathic Principles and Practice IV**

#### **2 credits**

The pelvic and lumbar areas are reviewed, as well as the physiologic motion patterns that pertain to these areas. Sacral, lumbar and pelvic somatic dysfunctions are discussed, and OMT for these dysfunctions is presented. The somatic and visceral relationships that pertain to these areas are also presented with clinical correlation in OB/GYN, GI and renal disease. Muscle energy and HVLA techniques for specific dysfunctions in these areas are presented.

### **DO 239BG – Osteopathic Principles and Practice V**

#### **2 credits**

Introduction to the principles of osteopathy in the cranial field is presented in lecture (an elective is offered in the third trimester for more complete

understanding and practical palpatory diagnosis). Cervical biomechanics and somatic dysfunction are reviewed, and muscle energy, HVLA, counterstrain and FPR techniques are covered in the lab sessions.

### **DO 239CG – Osteopathic Principles and Practice VI**

#### **2 credits**

Lectures and practice sessions are correlated and directed toward the understanding and management of various appendicular problems. Basic principles are taught and practiced along with basic techniques including muscle energy, HVLA and LAS.

### **DO 240AG, 240BG, 240CG – Primary Care Skills IV, V, VI**

#### **1 credit each term**

#### **Total 3 credits**

Advanced physical examination skills, minor-surgical skills and problem solving. Ophthalmologic and ENT examinations in the outpatient setting; advanced clinical workshops, case presentations and standardized patient exercises are integrated with second year medical course content. Small-group laboratory instruction in general surgical skills includes sessions on surgical scrub and sterile technique, gloving and gowning, suturing, phlebotomy, IV and catheterization. Standardized patient OSCE-type evaluation is included.

### **DO 311G – Medical Law**

#### **2 credits**

Legal obligations and ethical responsibilities of physicians, both professionally and personally; medicolegal issues such as judicial process, fraud and abuse, malpractice, torts, patient rights and privacy issues; issues related to HIPPA and compliance; online course and evaluation; begins anytime during the second year; HIPPA module satisfactory completion required to begin clinical clerkships; entire course including the online assessments must be completed by the end of the third year.

## Doctor of Pharmacy – Georgia Campus

### Didactic Courses

#### **PHAR 111G – Anatomy and Physiology**

##### **3 credits**

The first in a three course sequence with laboratory that covers human anatomy, physiology and pathophysiology. This course, in combination with the Anatomy Laboratory presents human anatomy from a structure and function foundation. The discussion of basic cell structure, cell function, and embryological development will be followed by study of the gross anatomy of the human body using the system approach. Anatomical structure and function will be discussed with particular attention to those components most important for the practicing pharmacist. The systems covered are the nervous, muscular, endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive. In addition, the fluids and fluid compartments with respect to composition, pH, osmolality, and movement of drugs between compartments will also be taught. Commonly used clinical laboratory values, and their application to diagnosing and monitoring of disease states, will be introduced as appropriate.

#### **PHAR 112G – Anatomy Laboratory**

##### **1 credit**

This course is the laboratory component of Anatomy and Physiology and generally parallels the lecture component of the course. The laboratory reinforces lecture concepts through the use of anatomical models and virtual dissection to demonstrate and identify the major anatomical structures of the human body. The discussion of anatomical structure and function will be focused on the nervous, muscular, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems. The cadaveric lab used by the medical students will be used at various times throughout the term to demonstrate the major anatomical structures of organ systems.

#### **PHAR 113G – Physiology and Pathophysiology I**

##### **3 credits**

The second in a three course sequence that covers human anatomy, physiology and pathophysiology. This course begins with a detailed discussion of the action potential in electrically excitable tissue and the contractile mechanism of muscle tissue. This is followed by an introduction to the concept of pathophysiology and discussion of the basic principles of how disease affects physiological function. An expanded discussion of genetics, especially with respect to congenital defects and neoplasia, is followed by discussion of the physiology and pathophysiology of the hematological, neurological, musculoskeletal, and integumentary systems. Thermoregulation will also be discussed. An emphasis is placed on application to the maintenance of a healthy lifestyle, understanding disease process and treatment, and the effects of drugs. Commonly used clinical laboratory values, and their application to diagnosing and monitoring of disease states, will be introduced as appropriate.



## **PHAR 114G – Physiology and Pathophysiology II**

### **3 credits**

The third in a three course sequence that covers human anatomy, physiology and pathophysiology. This course continues with the discussion of the physiology and pathophysiology of the blood, gastrointestinal, cardiovascular, pulmonary, renal and skeletal systems. An emphasis is placed on application to the maintenance of a healthy lifestyle, understanding disease process and treatment, and the effects of drugs. Commonly used clinical laboratory values, and their application to diagnosing and monitoring of disease states, will be introduced as appropriate.

## **PHAR 116G – Introduction to Drugs**

### **3 credits**

An introduction to the drug development and approval process is discussed with an emphasis on the regulation and enforcement of such actions. Basic concepts of retrieving drug information from credible resources are introduced. Also included in the course content is an overview of the standard pharmacy drug classification schema including basic chemical, pharmacological, DEA, and therapeutic classifications. Representative drugs from the major categories will be presented to illustrate the importance of pharmacy-specific information such as proprietary (brand) and generic drug names, dosage forms, approved and unapproved indications, basic mechanism of action, major drug interactions, adverse effects, pregnancy risk factors, and important patient information. Finally, a brief introduction to medical terminology will be presented.

## **PHAR 119G – Pharmacy Communications**

### **2 credits**

A study of communication theory and the transfer of meaning as they relate to the human transactions of professional pharmacists. Primary emphasis is placed on oral communication with diverse groups of patients, families and other health professionals with emphasis on active listening and empathy, cultural influences, and behavior modification. Writing exercises are also incorporated to enhance student knowledge of written communication as an effective tool for interpersonal communication and documentation of recommendations and consultations.

## **PHAR 121G – Health Care Systems**

### **2 credits**

The course provides an introduction to the U.S. health care system, managed health care, and pharmacy services. The structure, organization, and delivery of health care in the United States are presented with emphasis placed on pharmacists as related to patient care. Problems with the system will be covered along with approaches that are being used to address these problems. Emphasis will be placed on where pharmacy operates within our health care system, how it can be the solution to some of our health care problems and the major current issues surrounding health care.

## **PHAR 133G – Introduction to Pharmacy**

### **1 credit**

This course covers the scope and history of pharmacy as well as the variety of career pathways that a pharmacist may pursue, including but not limited to, community pharmacy, institutional pharmacy, government positions, education and research. A review of regulations that apply to the practice of pharmacy will also be addressed such as HIPAA and OSHA and a review of ethical practices that will be useful for students as they enter into their clinical experiences will be presented as well as interpretation of prescriptions and medication orders. Registration as Pharmacy Interns with the Georgia State Board of Pharmacy will be completed and a review of expectations and organization for the IPPE component of the curriculum will be presented.

## **PHAR 141G – Pharmaceutics**

### **3 credits**

A study of physical pharmacy and pharmaceutical dosage forms. Students will learn to apply their knowledge of the physical and chemical properties of drugs to the ability to formulate stable dosage forms that can be utilized in commercial production of, or individually compounded, drug products. Students will be introduced to the theory and practice involved in the rational selection of dosage forms and drug delivery systems as well as issues that may arise from these choices. The theory and practice of pharmaceutical compounding, including a discussion of Good Manufacturing Practices (GMPs) and Good Compounding Practices, as well as legal and professional issues are also discussed.

## **PHAR 145G – Pharmaceutical Calculations**

### **2 credits**

An introduction to metrology and pharmaceutical calculations. A brief review of basic mathematical concepts is followed by historical review of measurement systems specific to the profession of pharmacy. Detailed interpretation of the prescription and the variety of abbreviations and notations utilized is followed by presentation of the methods used to calculate, express, or determine the amount of drug to utilize in the preparation of a variety of pharmaceutical preparations. These preparations range from oral, topical, otic, ophthalmic and to parenteral products. Determination of drug concentration, tonicity, equivalents, potency, proof, density and specific gravity are also addressed.

## **PHAR 150G – Biochemistry**

### **3 credits**

An introduction to the physical, chemical, structural, and functional properties of molecules associated with the chemistry of life processes. Carbohydrate, lipid, protein, and nucleic acid biosynthesis and/or degradation will be discussed along with DNA and RNA biosynthesis, enzymology, and gene expression.

## **PHAR 155G – Pharmacy Practice Laboratory I**

### **1 credit**

This laboratory course will emphasize the development of pharmaceutical care

plans through the use of patient interviews and assessment techniques, drug information retrieval, and monitoring of drug therapy outcomes. Students will learn to use clinical data such as laboratory values, diagnostic tests, and the influence of disease states to provide pharmacist-managed, patient-centered pharmacy services. Proficiency in problem identification and evidence-based medicine along with triage and referral skills will also be developed. Training in pharmacist-administered immunizations will also be provided.

### **PHAR 162G – Pharmaceutics Laboratory**

#### **1 credit**

Students will become proficient with the equipment, calculations, procedures, and records used in the nonsterile compounding of various dosage forms. Good Compounding Practices adopted by the National Association of Boards of Pharmacy will be followed. Practical examples of compounding of liquid, solid, and semi-solid oral dosage forms as well as enteral and topical products will be prepared as part of the laboratory exercises.

### **PHAR 164G – Pharmacy Administration**

#### **3 credits**

Basic managerial, organizational, and financial management concepts are presented that enable the practicing pharmacist to manage people, change, structural demands, and organizational behavior to provide optimum care and services as a health professional. This course will also introduce entrepreneurial and marketing topics for use in pharmacy and health care system practice environments. The analysis of management principles as they relate to community and health-system pharmacy management will be stressed including planning, organizing, motivation, controlling, and marketing.

### **PHAR 167G – OTC**

#### **2 credits**

This course will present those conditions considered to be self-treatable according to current medical guidelines. For self-treatable conditions, a survey of the products available, their effectiveness, proper selection and appropriate patient counseling will be discussed. Counseling strategies specific to OTC products will also be presented.

### **PHAR 169G – Biopharmaceutics**

#### **3 credits**

A study of drug absorption, distribution, metabolism and excretion (ADME) as well as individual differences that influence these processes. Drug parameters that control ADME will be studied, such as solubility, pKa, molecular size, and protein binding. Physiological determinants underlying ADME, such as cellular transporters, hepatic metabolism, hepatic and renal elimination, as well as factors affecting drug distribution will also be presented. Finally, the concept of bioequivalence, its determination and application will be presented.

## **PHAR 211G – Integrated Therapeutics I**

### **4 credits**

This is the first course in the sequence that teaches the pharmacology, medicinal chemistry and therapeutics of medicinal agents. The integrated nature of this course emphasizes the interrelationship of these areas that is vital to understanding the basis of patient centered pharmaceutical care. Fundamental knowledge in these areas allows the clinician to understand the theory and application to aid in the selection of the proper therapeutic agent or agents for disease control in the presence of a number of variables including patient variables such as age, gender, diet, and co-existing conditions; drug variables such as potency, adverse effects, interactions, and pharmacokinetics; and others such as cost, availability, and alternative treatments available. This course begins with introductory material from each of the three areas that will aid in better understanding as more detail is added throughout the course.

## **PHAR 212G – Integrated Therapeutics II**

### **4 credits**

This is a continuation of the Integrated Therapeutics sequence. Initially, the drugs affecting the autonomic and neuromuscular systems are discussed followed by discussion of major disease states and the drugs used to treat them. Disease states and their treatment covered in this course are: cardiovascular diseases including hypertension, hyperlipidemias, arrhythmias, angina pectoris, heart failure and renal diseases including renal failure and disorders of fluid, electrolyte balance, and coagulability.

## **PHAR 213G – Integrated Therapeutics III**

### **4 credits**

This is a continuation of the Integrated therapeutics sequence. Disease states and their treatment covered in this course are central nervous system related drugs and disorders including anesthetics, sedative/hypnotics, anxiety, neuroses, major depressive disorder, bipolar disorder, psychoses, epilepsy, and neurodegenerative disorders. Issues impacting geriatric populations are also covered.

## **PHAR 224G – Immunology and Microbiology**

### **4 credits**

An integrated course in immunology and microbiology that emphasizes the role of each in the maintenance of health and the development, progression, and treatment of disease states related to immune dysfunction, microbiological infection, or both. An introduction to innate immunity, including biochemical and cellular aspects, as well as adaptive immunity, including humoral and cell-mediated immunity, and immunological memory is followed by a discussion of diseases of the immune system, the role of immunity in neoplasia, and manipulation of the immune system by pathogens, drugs and diet. Basic principles of microbiology including classification, anatomy, staining, and genetics of microorganisms is followed by a more detailed discussion of medically important bacteria, mycoplasmas, rickettsiae, chlamydiae, viruses, fungi, and parasites. Emphasis is placed on mechanisms of pathogenesis,

methods of control, mechanisms of resistance, and prevention of diseases caused by these organisms as well as the inter-relationship between micro-organisms and the immune system.

### **PHAR 227G – Pharmacokinetics**

#### **3 credits**

General principles of pharmacokinetic models are presented as they pertain primarily to the processes of absorption and elimination of drugs. Detailed mathematical models will be developed and utilized to determine the appropriate dose and dose interval based on patient specific data utilizing relevant examples throughout. Therapeutic monitoring of drug levels in the patient and adjustments in dosing based on monitoring will also be presented. This is followed by discussion of specific examples using drugs commonly dosed and monitored using detailed pharmacokinetic analysis.

### **PHAR 241G – Infectious Disease I**

#### **3 credits**

This is the first course in the Infectious Disease sequence that teaches the pharmacology, medicinal chemistry and therapeutics of agents used to treat infectious diseases. The integrated nature of this course emphasizes the interrelationship of these areas that is vital to understanding the basis of patient centered pharmaceutical care. Fundamental knowledge in these areas allows the clinician to understand the theory and application to aid in the selection of the proper therapeutic agent or agents for infection control in the presence of a number of variables including patient variables such as age, gender, diet, and co-existing conditions; drug variables, such as potency, adverse effects, interactions, and pharmacokinetics; and others such as cost, drug availability, and alternative treatments available. This course will cover agents used to treat infections caused by bacteria, mycoplasmas, and rickettsiae.

### **PHAR 242G – Infectious Disease II**

#### **3 credits**

This is a continuation of the Infectious Disease sequence, which covers the pharmacology, medicinal chemistry and therapeutics of agents used to treat infectious diseases. Infections caused by chlamydiae, viruses, fungi, and parasites will be covered in this course.

### **PHAR 246G – Pharmacy Practice**

#### **3 credits**

Familiarity with basic patient assessment will be followed by discussion of triage and patient referral skills. The fundamentals of clinically relevant patient data, patient histories, screening methods, laboratory values, and diagnostic tests will be used to evaluate and manage common disease states. The value of patient care plans, counseling and identification of therapeutic problems will also be emphasized.

## **PHAR 256G – Pharmacy Practice Laboratory II**

### **1 credit**

This laboratory is an introduction to the interpretation, preparation and dispensing of prescriptions under a variety of practice settings such as retail, institutional, and hospital using both bulk and unit-dose packaged drugs. Prescription analysis will involve the identification of medication errors such as under- and over-doses, drug interactions, and drug allergies. Patient profiles will be maintained and utilized and the role of automation, technology and distribution systems will be addressed. Safe medication use, reduction in medication errors, quality improvement, and workload efficiency will also be emphasized. Students will also be presented with opportunities to practice their skills in patient counseling.

## **PHAR 271G – Biostatistics**

### **3 credits**

This course builds on the statistical background from the prepharmacy curriculum with emphasis on the use of statistical knowledge to evaluate drug literature, pharmaceutical and health care research, and conduct studies within the practice of pharmacy. Statistical terminology, study design, sampling methods, and statistical analysis using a variety of techniques will be covered. Calculation of statistical results from sample data and interpretation of the results will be presented. Application of this knowledge will be applied to the study of clinical pharmacy problems and analysis of pharmaceutical research and drug literature.

## **PHAR 311G – Integrated Therapeutics IV**

### **4 credits**

This is a continuation of the Integrated Therapeutics sequence. Disease states and their treatment covered in this course are: pulmonary disorders including asthma, emphysema, and COPD; inflammatory disorders including arthritis, autoimmune disorders; pain management; as well as antineoplastics.

## **PHAR 312G – Integrated Therapeutics V**

### **4 credits**

This is a continuation of the Integrated Therapeutics sequence. Disease states and their treatment covered in this course are: the endocrine system, including hormone regulation and the diseases of diabetes, hypo- and hyperthyroidism, contraceptives and infertility; gastrointestinal disorders such as gastroesophageal reflux disease, ulcers, ulcerative colitis, Crohn's disease; and finally bone disorders such as osteoporosis and Paget's disease.

## **PHAR 314G – Hospital Pharmacy**

### **3 credits**

Primarily emphasizing the practice of pharmacy in the hospital setting, students will be introduced to medication distribution systems, institutional accreditation, advanced pharmacy practice in hospitals, sterile preparations and admixtures, and interprofessional teams, among others. Discussion of poison control centers,

investigational drugs, automation and central vs. satellite pharmacies will also be discussed.

### **PHAR 321G – Pharmacy Practice Laboratory III**

#### **1 credit**

This laboratory course introduces the student to the preparation of sterile and biohazardous products encountered in pharmacy practice utilizing the latest technology for maintaining sterility or providing human safety during product preparation. Training in aseptic technique and the preparation of sterile products in a sterile environment, such as total parenteral nutrition admixtures, will be provided with special emphasis on USP 797 regulations. Special procedures, quality control, use of available references, appropriate calculations, and federal and state regulations will also be addressed. Training in the preparation of hazardous pharmaceuticals will also be provided.

### **PHAR 323G – Drug Literature Evaluation**

#### **3 credits**

A discussion of the types and sources of drug literature, how to search the literature and the publication process is followed by discussion of study design with emphasis on methodology, statistical analysis and evaluation of the results. Finally, the application of the acquired evaluation skills in the delivery of evidence-based pharmaceutical care is presented.

### **PHAR 346G – Pharmacoeconomics**

#### **3 credits**

Economic principles are used to study drug use and outcomes in large populations to improve quality-of-life and develop models for allocation of limited health care resources. Methods for continual monitoring of beneficial and adverse effects are also discussed.

### **PHAR 351G – Toxicology**

#### **3 credits**

A discussion of the general principles of toxicology is followed by specific discussion of toxicities to the liver, kidney, lungs, cardiovascular and reproductive systems. Toxicity resulting from the use of specific drugs is then presented followed by toxicities due to other sources such as exposure to industrial, environmental and household agents, among others. Finally, the prevention, assessment, and treatment of toxicities, with emphasis on the role of the pharmacist, are presented.

### **PHAR 368G – Pharmacy Law and Ethics**

#### **4 credits**

Federal and state laws and regulations which pertain to the practice of pharmacy in Georgia are presented in detail. General business law and liability issues which affect the practice of pharmacy will also be discussed. Finally, ethical issues as they relate to the practice of pharmacy, and healthcare delivery in general, are examined.

## **PHAR 375G – Capstone**

### **4 credits**

The course is designed to provide a student with a comprehensive and integrated assessment of the entire pharmacy program followed by appropriate feedback as a final step to ensure that they are prepared to enter into the Advanced Pharmacy Practice Experiences. Assessment will be designed to imitate, as closely as possible, typical clinical situations that students should be prepared for following the completion of their didactic work and IPPE rotations.

## **PHAR 377G – Seminar**

### **1 credit**

An open forum for discussion of contemporary issues in pharmacy for third year students prior to their progression to the Advanced Pharmacy Practice Experiences. Topics for discussion will come from a variety of sources that may have an impact on the practice of pharmacy. These include accrediting agencies; federal, state and local government regulations; Georgia State Board of Pharmacy and other boards of pharmacy including the National Association of Boards of Pharmacy; national and local pharmacy organizations; as well as student requested topics.

## **Experiential Courses**

### ***Introductory Pharmacy Practice Experience (IPPE) Courses***

## **PHAR 171G – IPPE I and PHAR 172G IPPE II**

### **1 credit each**

This is the first and second course in a series of IPPEs that provide direct practical experience to the student in the form of either an institutional or community pharmacy environment in alternate semesters. The student will begin in an observational role and then transition to application and utilization of skills learned in the pharmacy curriculum as it applies to technical pharmacy skills, pharmacy management, distributive systems, and core practice skills: communication, calculations, ethics, medication safety, managing resources, wellness, health promotion, technology, informatics and critical thinking. The skills developed during this sequence will prepare the student to enter into the Advanced Pharmacy Practice Experiences (APPEs) during the fourth year of the professional pharmacy curriculum.

## **PHAR 261G – IPPE III and PHAR 262G – IPPE IV**

### **1 credit each**

This is the third and fourth in a series of IPPEs that provide direct practical experience to the student in the form of either a long-term care facility (LTC) or ambulatory care environment (Longitudinal Patient Care Experience) as well as a community pharmacy environment in alternate semesters. In the LTC experience students will become familiar with the role of the pharmacist as part of an interdisciplinary team in the provision of patient care. Students will also conduct patient interviews, review patient profiles/charts, and further develop



their SOAP note skills. The community experience will continue the development from their first year introductory pharmacy practice experiences with development of skills in patient interviews, patient profiles/charts, and SOAP note skills. The skills developed during this sequence will prepare the student to enter into the Advanced Pharmacy Practice Experiences (APPEs) during the fourth year of the professional pharmacy curriculum.

### **PHAR 331G – IPPE V**

#### **2 credits**

This is the final course in the series of introductory pharmacy practice experiences and will provide direct practical experience in an institutional setting. Emphasis will be placed on developing professional communication skills, clinical assessment abilities, and SOAP note skills. In addition, the student will be exposed at an intermediate level to the distributive functions within the institutional pharmacy. The skills developed during this sequence will prepare the student to enter into the Advanced Pharmacy Practice Experiences (APPEs) during the fourth year of the professional pharmacy curriculum.

### **Advanced Pharmacy Practice Experience (APPE) Courses**

#### **Required APPEs**

##### **Advanced Institutional**

#### **4 credits**

Supervised professional experience in the functions of a pharmacist in the hospital pharmacy practice setting.

##### **Advanced Community**

#### **4 credits**

Supervised professional experience in the functions of a pharmacist in the community pharmacy practice setting.

##### **Advanced Ambulatory Care**

#### **4 credits**

Supervised professional experience in the functions of a clinical pharmacist in the ambulatory care practice setting.

##### **Advance Acute Care Medicine**

#### **4 credits**

Supervised professional experience in the functions of a clinical pharmacist in the acute care hospital practice setting.

#### **Elective APPEs (select any 4)**

The following list contains examples of elective APPE sites that may, or may not, be developed by the PCOM School of Pharmacy – Georgia Campus. The number and type offered in any one year depends upon the availability of suitable sites, faculty, and the number of students requesting the specific elective. Therefore,

there is no guarantee a student will be assigned to any one of these specific electives; however, each student will be assigned to four elective sites to complete APPE requirements.

Academia  
Cardiology  
Community Pharmacy Administration  
Community Pharmacy Compounding  
Critical Care  
Diabetes  
HIV/Transplant Clinic Pharmacy  
Home Care Pharmacy  
Hospice  
Independent Community Pharmacy  
Indian Health Service  
Industry  
Infectious Diseases  
Informatics/Technology  
Institutional Pharmacy Administration  
LTC/Geriatric Pharmacy  
Managed Care  
Medication Therapy Management  
Neonatology  
Nuclear Pharmacy  
Nursing Home Closed Door Pharmacy/Geriatrics  
Oncology  
OR Pharmacy  
Pediatrics  
Psychiatric Pharmacy  
Pulmonary  
Women's Health

## **Certificate – Biomedical Sciences and Master of Science – Philadelphia Campus**

### **BIOM 501 – Molecular Basis of Medicine**

#### **7 credits**

The course presents fundamental information regarding biochemistry, molecular biology and medical genetics in a way that is highly practical in today's clinical and/or research setting. This overview course includes discussions of molecular biology and genetics, metabolism and the body's production and use of energy, and blood-related issues such as blood proteins, lipoproteins and hemostasis. In addition, interactive case discussions and clinical correlations are designed to put the information into a clinical context.

### **BIOM 502 – The Infectious Process**

#### **3 credits**

The infectious process course is designed to introduce graduate students to fundamental principles of immunology, bacteriology and virology. This overview includes discussions of the interplay between the microbial pathogen and the host immune response during the infectious process, as well as topics related to infectious disease and public health. Two laboratory exercises are conducted to emphasize selected prokaryotic structures, the Gram stain, the concepts of normal flora and microbial transmission, and surgical scrub technique. In addition, students will work in small groups to research and present information on a topic pertinent to infectious disease and host-pathogen interactions.

### **BIOM 503 – Human Anatomy**

#### **6 credits**

This course provides comprehensive consideration of the human anatomy as it relates to function in order to provide the anatomical component of diagnosis and treatment. Gross anatomy of all systems in the human body is reviewed, including musculoskeletal, neuronal, lymphatic, respiratory, cardiovascular, digestive, urinary and reproductive with an emphasis on structural relationships and functional correlations to clinical applications. Course objectives include the acquisition of anatomical structural knowledge, the development of team working, oral presentation and written communication skills as well as the development of critical assessment of biomedical literature. Learning is facilitated through lecture, group study of anatomical dissections and team problem based learning (PBL).

### **BIOM 504 – Histology**

#### **4 credits**

Students receive fundamental information regarding the structure and function of cells, how cells are organized into tissues and how tissues are organized into organs. In the histology laboratory students learn to identify cells, tissues and organs through a microscope.

## **BIOM 505 – Neurosciences**

### **3 credits**

This course provides a broad introduction to the basic and clinical neurosciences, including motor function, cerebrovascular blood supply, sensory receptors, higher cortical functions, the limbic system, neurometabolism, and nervous system structure and function.

## **BIOM 506 – Medical Pharmacology**

### **3 credits**

Medical pharmacology presents an introduction to the basic concepts and principles of pharmacology. Specific lectures are presented in the areas of pharmacokinetics, autonomic pharmacology, cardiovascular pharmacology, CNS pharmacology and the control of pain.

## **BIOM 507 – Physiology**

### **3 credits**

This introductory course focused on medical physiology correlates the principles of basic functional mechanisms to practical methods for clinical assessment. Students receive hands-on instruction in methods to evaluate physiological mechanisms in a laboratory setting. Classroom and laboratory instruction are correlated to enhance understanding in the following areas: basic electrophysiology, cardiac, skeletal muscle physiology, gastrointestinal, respiratory, cardiovascular and renal physiology.

## **BIOM 690 – Research Methods**

### **2 credits**

This course introduces students to fundamental concepts of epidemiology and research design in health and disease. Principles of evidence-based medicine are discussed as they relate to key areas of disease prevention, health promotion and therapy discussed. Community-based issues, problems and solutions are addressed. Students who complete the course will be able to understand and apply basic statistical terms and applications as well as various research design models that appear in current medical literature. Students learn to assess the quality of medical literature research designs to study commonly encountered clinical and community issues. Students will learn to describe the relationship between the medical literature and evidence-based medicine (EBM). This course is cross listed with PHYA 542.

## **BIOM 691 – Biomedical Research I**

### **6 – 8 credits**

Supervised individual research projects undertaken by students in the program leading to the degree of Master of Science in Biomedical Sciences.

Prerequisites: BIOM 501, BIOM 502, BIOM 503, BIOM 504, BIOM 505, BIOM 506 and BIOM 507

**BIOM 692 – Biomedical Research II****6 – 8 credits**

Supervised individual research projects undertaken by students in the program leading to the degree of Master of Science in Biomedical Sciences.

**BIOM 693 – Biomedical Research III****8 credits**

Supervised individual research projects undertaken by students in the program leading to the degree of Master of Science in Biomedical Sciences.

A component of the research project is a Journal Club that focuses on the presentation of recent literature published in refereed journals. Emphasis is placed on developing basic skills in communicating scientific studies; critical review of literature including research design, data analysis and data interpretation; and recognition of the relationship of previously published studies with the student's current work.

**BIOM 699 – Thesis Continuation****1 credit**

Students who have registered for the 24 credits of Biomedical Research, but have not defended their thesis, must register each semester for the one credit BIO 699 until their defense.

## **Master of Science – Biomedical Science Neuromusculoskeletal Concentration – Philadelphia Campus**

This concentration is only open to students pursuing the doctor of osteopathic medicine degree at the Philadelphia Campus.

### **BOMM 501 – Advanced Clinical Skills in Neuromusculoskeletal Science I 6 credits**

Interactive small group discussion of the advanced NMS sciences and underlying evidence-base needed to apply and/or teach the following topics: the philosophy and art of osteopathic medicine; the art of clinical patient observation, palpatory diagnosis and treatment; physiologic motions (regional and inter-segmental) in evaluation and diagnosis of the spine and pelvis; focused and advanced clinical skills in performing muscle energy and high-velocity low-amplitude OMT for somatic dysfunction in the spine and pelvis; visceral manipulation; osteopathic principles in the management of genitourinary and gastrointestinal disorders.

### **BOMM 502 – Advanced Clinical Skills in Neuromusculoskeletal Science II 6 credits**

Interactive small group discussion of the advanced NMS sciences and underlying evidence-base needed to apply and/or teach the following topics: advanced clinical skills related to diagnosis and treatment of somatic dysfunction using principles of soft-tissue OMT, myofascial release, ligamentous articular strain, counterstrain, and myofascial trigger points throughout the body; integration of the respiratory-circulatory and primary respiratory models of clinical care; advanced clinical skills in performing muscle energy, high-velocity low-amplitude, balanced ligamentous tension, facilitated positional release, Still technique, ligamentous articular strain, and OCF in the cervical and cranial regions.

### **BOMM 503 – Advanced Clinical Skills in Neuromusculoskeletal Science III 6 credits**

Interactive small group discussion of the advanced NMS sciences and underlying evidence-base needed to apply and/or teach the following topics: spinal and extremity biomechanics; considerations in postural disorders (including rotoscoliotic and kyphotic-lordiotic conditions and integration of orthotics); clinical skills in performing muscle energy and high-velocity low-amplitude to the thoracic spine and costal region; integrated osteopathic and orthopedic exams of the extremities; muscle energy, high-velocity low-amplitude, counterstrain, balanced ligamentous tension, and facilitated positional release for the treatment of extremity somatic dysfunction; osteopathic principles in the management of EENT, cardiovascular, renal and pulmonary systems; advanced topics in viscerosomatic, somato-visceral, somato-somatic and psychosomatic reflexes.

## **BOMM 504 – Special Topics in Neuromusculoskeletal Science**

### **3 credits**

Focused 40-hour lecture and laboratory course fulfilling the national standards of the Cranial Academy for Osteopathy in the Cranial Field.

## **BOMM 591 – Practicum Lab I: Teaching Physician-Level Palpatory and Psychomotor Skills**

### **4 credits**

Practical translational application of cognitive information acquired in BOMM 501 to the teaching of psychomotor skills to physicians or physicians-in-training. Emphasis is on describing and teaching palpatory diagnosis, layer-by-layer palpation, barrier palpation and pattern diagnosis. Also emphasized are affective skills and behaviors expected in professionals who teach psychomotor skills.

## **BOMM 592 – Practicum Lab II: Teaching Physician-Level Myofascial and Craniocervical Psychomotor Skills**

### **4 credits**

Practical translational application of cognitive information acquired in BOMM 502 to the teaching of psychomotor skills to physicians or physicians-in-training. Emphasis is on describing and teaching those characteristics associated with myofascial responses to therapeutic interventions (including creep, the hysteresis phenomenon, and various forms of direct and indirect releases). Also emphasized are affective skills and behaviors expected in professionals who teach models of healing.

## **BOMM 593 – Practicum Lab III: Teaching Psychomotor Skills to Address Systemic and Appendicular Disorders**

### **4 credits**

Practical translational application of cognitive information acquired by BOMM 503 to the teaching of psychomotor skills to physicians or physicians-in-training. Emphasis is on developing affective skills and behaviors used by professionals to pique student interest and to identify meaningful, clinically-relevant situations connected to the somatic, visceral, axial and appendicular techniques being taught.

## **BOMM 691 – Research Design**

### **6 credits**

Research design in NMS; unique aspects of osteopathic and NMS research design and interpretation; understanding and determining inter-examiner reliability ( $\kappa$ ) in palpatory diagnostic tests; instruments and equipment used in NMS research, research ethics, and the importance of the Institutional Review Board; funding and grantsmanship; practical application of the above topics in selecting a mentor and initiating a research project.

## **BOMM 692 – Neuromusculoskeletal Tests and Measurements**

### **6 credits**

Recording and entering NMS and biomechanical data; applying and conducting

inter-examiner reliability (kappa) in palpatory diagnostic tests; quantifying pressures and vectors used in osteopathic palpation and manual treatment; practical applications of the above topics in a research project.

**BOMM 693 – Statistical Analysis and Data Synthesis**

**6 credits**

Statistical analysis in NMS studies; designing research posters and presentations; unique aspects of interpreting NMS outcomes.

**BOMM 694 – Thesis**

**6 credits**

Preparation and defense of a thesis involving NMS following the guidelines set forth by the College; the thesis process is a one-on-one with an NMS research mentor with committee input.



## **Certificate – Biomedical Sciences and Master of Science – Georgia Campus**

### **BIOM 551G – Human Gross Anatomy**

#### **5 credits**

This course introduces students to a medical gross anatomy presented from three perspectives: 1) systemic, 2) regional, and 3) applied (clinical) anatomy. It uses a lecture format and laboratory sessions using plastinated specimens and models.

### **BIOM 553G – Basic Concepts in Biomedical Modeling**

#### **4 credits**

This course introduces general concepts of biochemistry, cell biology and physiology in an integrated fashion to teach students how to integrate medical basic sciences and enhance learning and retention of biomedical information.

### **BIOM 554G – Neuroscience**

#### **4 credits**

This course introduces the student to the field of medical neurosciences including cognition, the senses and the neuromuscular junctions.

### **BIOM 556G – Human Physiology**

#### **5 credits**

Human medical physiology is taught from a systems approach covering each of the major systems except neuro and their regulation through autonomic and endocrine mechanisms.

### **BIOM 557G – Microscopic Anatomy and Embryology**

#### **6 credits**

The histology component of this course covers basic structure and function of eukaryotic cells, how these cells are organized into four tissue types, and then how tissues are organized into organs to support the various systems of the body. The embryology component focuses on gamatogenesis through fetal development and explores embryogenesis for each organ system.

### **BIOM 558G – Biochemistry, Cellular and Molecular Biology**

#### **5 credits**

This course provides the basis for understanding concepts of molecular medicine relevant in subsequent coursework in the biomedical sciences. Areas of concentration include: biochemistry cell and molecular biology and genetics. Topics include studies of: cellular organization; signaling and replication; gene expression and regulation; carbohydrate, lipid, protein and nucleic acid metabolism; enzymes; and mechanisms of inheritance and genetic engineering.

### **BIOM 602G – Infection and Immunity**

#### **5 credits**

The content of this course focuses on medical microbiology and immunology covering major pathogens, their mechanisms of infection and transmission and

the body's mechanisms for handling infections and inflammatory responses.

### **BIOM 603G – Concepts in Pharmacology and Toxicology**

**4 credits**

This course introduces the student to major concepts and drugs used in autonomic and cardiovascular and neuro-pharmacology and toxicology.

### **BIOM 604G – Nutritional Biochemistry**

**4 credits**

This course introduces the student to the foundation of nutrition as it impacts biochemical pathways within the body.

### **BIOM 605G – Special Topics**

**3 - 5 credits**

This course number is maintained for use when a need is perceived or requested to meet a one-time need.

### **BIOM 606G – Analytical Reading**

**2 credits**

This course requires directed readings and presentations of the current literature, exposing students to high impact areas of the biomedical sciences and enhancing critical reading and public speaking skills.

### **BIOM 607G – Independent Study/Scientific Composition**

**6 credits**

This course requires the student to write a major review article of a topic chosen by the student and supervised by a graduate faculty member. The student must also present his/her topic in a formal presentation by the end of the third term.

### **BIOM 609G – Biostatistics and Epidemiology**

**3 credits**

(formerly BIOM 552G)

This course introduces the student to basic principles of statistical and epidemiologic methods providing the student with the foundations for research design and critical reading of the scientific literature.

### **BIOM 693G – Biomedical Research/Elective**

**6 - 21 credits**

Supervised individual research projects undertaken by students in the program leading to the degree of Master of Science in Biomedical Sciences.

### **BIOM 699G – Thesis Continuation**

**1 credit**

Program Notes

1. The program in Georgia operates a journal club/seminar series. Second year/MS seeking students are expected to attend; Certificate/first year students

are encouraged to attend.

2. Non-Thesis students are required to enroll in and complete the writing of a Review/Term Paper that must be completed during the third term of the second year. To facilitate successful completion of this task in a timely fashion students are required to choose a Mentor, select a Title, and complete an outline for this project by the end of Term 1 of their second year.

## **Master of Science – Forensic Medicine**

### **FMED 499 – Basic Human Biology in Forensic Medicine (Pathway Program Only)**

#### **3 credits**

This course is for students enrolled in the Pathway program that matriculates into the MS Forensic Medicine degree. The course is designed for non-biomedical bachelor degree students as a preparatory course preceding the forensic medicine curriculum. Part one of this course is an overview of general biology that is pertinent to forensic medicine, and part two is human anatomy and physiology. Basic medical histology will be incorporated into the later part of this course. This course is graded on a pass/fail basis.

### **FMED 500 – Pathology for Forensic Medicine**

#### **4 credits**

The course provides a systematic approach to the pathological basis of the principles of forensic medicine. The course begins with an overview of cell injury, death, adaptation, repair and regeneration. It continues with a survey of the dermatological, skeletal, neurological, endocrine, immunological, cardiorespiratory, vascular, gastrointestinal, renal, urological and reproductive systems. Special emphasis is given to conditions of the cardiovascular, cardiorespiratory and central nervous systems that cause death.

### **FMED 501 – Principles of Forensic Medicine I**

#### **6 credits**

This course begins with an overview of the field of forensic medicine. This includes discussion of the history of forensic science and medicine. Also discussed are the roles of medical examiners, coroners and non-physician medicolegal death investigators. General principles of crime scene investigation are introduced. Instruction then moves to the science behind forensic medicine. Topics in this section include post-mortem changes, sudden natural death, blunt-force injury, sharp-force injury, ballistics and gun shot wounds. Also taught here are asphyxiation, drowning, thermal injuries, electrical injuries and lightning injuries.

Prerequisite: FMED 500

### **FMED 502 – Principles of Forensic Medicine II**

#### **6 credits**

This course continues the overview of the field of forensic medicine. Topics covered in this course include forensic study of toxicology, anthropology, odontology, entomology and neuropathology. Students also learn about forensic medicine aspects of motor vehicle accidents, explosions and bombs, bioterrorism and mass fatalities. This course covers use of fingerprinting, trace evidence analysis and DNA analysis in conducting medicolegal investigations. Students will be given an outline of criminal law and considerations in preparing and delivering court testimony. Investigation of special crimes including child abuse,

sexual assault, arson and deaths of persons in custody will be discussed as well as techniques for providing grief assistance.

Prerequisites: FMED 501

### **FMED 504 – Research Design and Methodology**

#### **4 credits**

This course provides a foundation in research design, concepts and methodology with an emphasis on epidemiology. Students will evaluate the relationship of research design frameworks and research outcomes. The application of biostatistics and epidemiology concepts to the interpretation of the medical literature will also be discussed.

### **FMED 505 – Bioethics in Professional Practice**

#### **4 credits**

This course introduces students to the field of biomedical ethics and related medicolegal concepts. Material is presented to provide students with a basic understanding of the legal obligations and ethical responsibilities of the health care provider. Topics include research involving human participants and animals, medical and health care ethics, and the implications of applied genetics and biotechnology.

### **FMED 506 – Evidence-Based Forensic Medicine**

#### **4 credits**

This course introduces students to the emerging field of evidence-based medicine. It begins with a history of the field. Students learn how to ask a clinical question so that it may be answered and how to use that question to formulate an effective literature search to find the best answer to the question. In the next phase, students learn how to evaluate the importance and validity of the evidence. Finally, they learn how to use the evidence-supported answer in a manner that matches the values and views of their patients.

### **FMED 508 – Capstone Integrated Experience**

#### **8 credits**

The capstone integrated experience project is a research project that will involve field experience and/or research in the area of forensic medicine. The objective is to afford students the opportunity to apply the knowledge and the skills they have acquired through their academic coursework in a real life setting in an area of personal interest within the scope of forensic medicine. This project will culminate with a final paper at the conclusion of the experience.

### **FMED 513 – Law and Evidentiary Procedure**

#### **4 credits**

This interactive online course focuses on the role of the forensic medicine professional in the legal system, starting with an overview of the American legal system and continuing with an in depth study of evidentiary issues, rules and procedures.

## Master of Science – Health Sciences – Physician Assistant Studies

### **PHYA 501 – Pharmacological Concepts and Pharmacotherapeutics**

#### **2 credits**

This course is the first in a series of four that provide the physician assistant student with a broad survey of the basic principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics. This course reviews the mechanism(s) of action, toxicities and interactions of specific drugs and drug classes, as well as providing the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacological therapy. Instruction also focuses on general pharmacological principles and infectious diseases.

### **PHYA 502 – Human Gross Anatomy**

#### **6 credits**

This course constitutes a comprehensive consideration of human anatomy using a regional approach to the human body. The lecture component of the course consists of a detailed explanation and clarification of the relevant anatomy including general principles and concepts with a strong emphasis on the clinical relevance of each area considered. The laboratory component of the course consists of examination of dissected or prosected cadavers, special dissections by small groups of students on cadavers, examination of plastinated specimens, models, X-rays, cross sections, bones and appropriate videos of human dissection and clinical procedures. An introductory self-study medical terminology section will also be presented.

### **PHYA 503 – History Taking and Physical Examination**

#### **10 credits**

This course is designed to provide students with the fundamental cognitive knowledge of interviewing, patient communication skills and general physical examination procedures that are necessary to conduct an appropriate and thorough medical interview and comprehensive physical examination for patients of all ages. Students will develop these patient interview and communication skills and general physical examination procedures through classroom work and structured clinical experiences with standardized patients under simulated conditions. Students will also have an introduction to genetics in medicine during this course. Digital recording capabilities will allow students to review their clinical performance with faculty.

### **PHYA 510 – Clinical Medicine I**

#### **10 credits**

This course is the first of a sequence of three courses that are designed to prepare physician assistant students for their professional clinical role. Students continue to develop and refine their patient communication, medical history taking and physical examination skills. This course provides the student with a body-system and problem-oriented approach to understanding the etiology, epidemiology, pathophysiology, clinical manifestations, laboratory and diagnostic studies, and

diagnosis and treatment of specific diseases encountered in general practice. Health care providers will discuss specific focused physical examinations of each body system. For each disease or problem, related health promotion, disease prevention, medical nutrition, genetic and molecular mechanism of health and disease, rehabilitative care, and patient education topics are also presented. Other professional issues are also considered including competency with various medical instruments and procedures. Students will also be prepared to present patient data orally as well as document patient data through the use of our standardized patient lab and clinical skills seminars. The specific specialty areas and body-systems covered include infectious diseases, dermatology, endocrinology, otorhinolaryngology, gastroenterology, hematology and pulmonology.

### **PHYA 511 – Clinical Medicine II**

#### **10 credits**

This course is the second of a sequence of three courses that are designed to prepare physician assistant students for their professional clinical role. Students continue to develop and refine their patient communication, medical history taking and physical examination skills. This course provides the student with a body-system and problem-oriented approach to understanding the etiology, epidemiology, pathophysiology, clinical manifestations, laboratory and diagnostic studies, and diagnosis and treatment of specific diseases encountered in general practice. Health care providers will discuss specific focused physical examinations of each body-system. For each disease or problem, related health promotion, disease prevention, medical nutrition, genetic and molecular mechanism of health and disease, rehabilitative care, and patient education topics are also presented. Other professional issues are also considered including competency with various medical instruments and procedures. Students will also be prepared to present patient data orally as well as document patient data through the use of our standardized patient lab and clinical skills seminars. The specific specialty areas and body-systems covered include cardiology, urology, neurology, nephrology, ophthalmology, oncology and rheumatology. Students are certified in basic cardiac life support.

### **PHYA 512 – Clinical Medicine III**

#### **12 credits**

This course is the third of a sequence of three courses that are designed to prepare physician assistant students for their professional clinical role. Students continue to develop and refine their patient communication, medical history taking and physical examination skills. This sequence of courses provides the student with a body-system and problem-oriented approach to understanding the etiology, epidemiology, pathophysiology, clinical manifestations, laboratory and diagnostic studies, and diagnosis and treatment of specific diseases encountered in general practice, general surgery, general pediatrics and the emergency room. Health care providers will discuss specific focused physical examinations of each body-system. For each disease or problem, related health promotion, disease prevention, medical nutrition, genetic and molecular

mechanism of health and disease, rehabilitative care, and patient education topics are also presented. Other professional issues are also considered including competency with various medical instruments and procedures. Students will also be prepared to present patient data orally as well as document patient data through the use of our standardized patient lab and clinical skills seminars. The specific specialty areas and body-systems covered include obstetrics and gynecology, geriatrics, orthopedics, surgery, emergency medicine and pediatrics. Students will also take an advanced cardiac life support course.

### **PHYA 514 – Professional Practice Issues and Health Policy**

#### **3 credits**

This course will expose students to many of the principles and practices of health policy. It will include consideration of the impact of socioeconomic issues affecting health care, an overview of selected aspects of the various health care systems, and financial and productivity issues relevant to the PA profession. Other issues such as quality assurance, risk management, managed care environments, coding and billing, patient referrals, and other issues pertinent to current health care practice will be discussed. Students will learn about cultural issues and their impact on health policy. Also covered in this course are the history, development and current status of the physician assistant profession in the U.S. medical system in the 21st century as well as the political and legal issues related to PA practice. This course presents overviews of PA professional organizations, and PA program accreditation, as well as certification and recertification of PAs. The interrelated issues of licensure, credentialing and professional liability are also covered.

### **PHYA 515 – Medicine, Law and Health Care Ethics**

#### **1 credit**

This course is presented to provide physician assistant students with an understanding of basic medical law, public health policy and medical ethics. Lectures in medical ethics and law/medical jurisprudence are presented to provide students with a basic understanding of the legal obligations and ethical responsibilities of the health care provider, both personally and professionally. This course also presents the fundamentals of health policy, violence prevention, death/dying decisions, commitment to patient welfare, respect for self and others, impact of genetic technology, disease control and basics of clinical preventive medicine.

### **PHYA 517 – Genetics**

#### **1 credit**

This course is designed to introduce the PA student to concepts of genetics/genomics including: genetics terminology, patterns of inheritance, utility of genetic family history in practice, recognizing genetic contribution to disease, genetic screening, pre-symptomatic testing, diagnostic testing and pharmacogenetics. The course will also cover some of the ethical, legal and social implications related to the provision of genetics services. (This is a year-long course starting in the fall.)



## **PHYA 519 – Human Physiology**

### **4 credits**

This course is designed to provide a comprehensive review of normal human physiology using a regional approach to the human body. The lecture component of this course will consist of a detailed explanation and clarification of the relevant physiology including general principles and concepts with a strong emphasis on the clinical relevance of each area considered.

## **PHYA 520 – Pharmacology I**

### **2 credits**

This course is the second in a sequence of four courses that represent a broad survey of the basic principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics. This course reviews the mechanism(s) of actions, toxicities and interactions of specific drugs and drug classes, as well as provides the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy. Combined lecture and problem-based learning case presentations are designed to develop the pharmacologic and therapeutic skills that a physician assistant will need to enhance patient care in clinical practice, focusing on the following specialty areas: infectious diseases, dermatology, endocrinology, otorhinolaryngology, hematology and pulmonology.

## **PHYA 521 – Pharmacology II**

### **2 credits**

This course is the third in a sequence of four courses that represent a broad survey of the basic principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics. This course reviews the mechanism(s) of actions, toxicities and interactions of specific drugs and drug classes, as well as provides the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy. Combined lecture and problem-based learning case presentations are designed to develop the pharmacologic and therapeutic skills that a physician assistant will need to enhance patient care in clinical practice, focusing on the following specialty areas: neurology, urology, nephrology, ophthalmology, oncology, cardiology and rheumatology.

## **PHYA 522 – Pharmacology III**

### **1 credit**

This course is the fourth of a sequence of four courses that represent a broad survey of the basic principles of pharmacokinetics, pharmacodynamics and pharmacotherapeutics. This course reviews the mechanism(s) of actions, toxicities and interactions of specific drugs and drug classes as well as provides the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy. Combined lecture and problem-based learning case presentations are designed to develop the pharmacologic and therapeutic skills that a physician assistant will need to enhance patient care in clinical

practice, focusing on the following specialty areas: obstetrics and gynecology, pediatrics, geriatrics, orthopedics, emergency medicine and general surgery.

### **PHYA 530 – Behavioral Medicine and Psychiatry**

#### **2 credits**

The primary goal of this course is to provide the physician assistant student with the necessary skills, knowledge and sensitivity to deal effectively with various psychiatric, emotional and behavioral issues common to patients in primary care settings. Students will be able to outline skills in coping with illness, injury and stress. Students will gain skills in the evaluation and management of patients with a variety of psychiatric problems as well as an appreciation for the health care team as it applies to the mental health patient. This course includes a mixture of didactic presentations, group discussions and interviews with standardized patients.

### **PHYA 531 – Community Health Service I**

#### **2 credits**

This course provides students an opportunity to interface with community-based agencies and become familiar with diverse communities, both their challenges and their resources. In addition, this course allows students to develop a better understanding of how social, environmental and cultural factors can impact their patients' attitudes about health. Throughout this course, students learn the importance of collaboration when developing relevant and effective health care interventions.

### **PHYA 532 – Community Health Service II**

#### **1 credit**

This is the second of a sequenced two-term course that allows students to develop a better understanding of how social, environmental and cultural factors can impact their patients' attitudes about health. In this course students have the opportunity to perform an ongoing community service project with students at local underserved schools.

### **PHYA 535 – Pathology I**

#### **2 credits**

This course is the first of a sequence of three courses that provides the student with a basic understanding of the nature and mechanisms of disease from a pathologic view. This study of pathology provides understanding of the nature and mechanisms of disease, which is the foundation for critical thinking in clinical practice. This sequence of courses provides a systematic approach to the physiologic basis for disease. The general pathology of cell injury, inflammation, infections and neoplasia is presented along with the disease processes of organ systems including the immunologic, dermatologic, hematologic, gastrointestinal and respiratory.

### **PHYA 536 – Pathology II**

#### **2 credits**

This course is the second of a sequence of three courses that provides the student

with a basic understanding of the nature and mechanisms of disease from a pathologic view. This study of pathology provides understanding of the nature and mechanisms of disease, which is the foundation for critical thinking in clinical practice. This sequence of courses provides a systematic approach to the physiologic basis for disease. Lectures are focused on the disease processes of organ systems, the renal, urinary, ophthalmologic and neurologic systems.

### **PHYA 537 – Pathology III**

#### **2 credits**

This course is the third of a sequence of three courses that provides the student with a basic understanding of the nature and mechanisms of disease from a pathologic view. This study of pathology provides understanding of the nature and mechanisms of disease, which is the foundation for critical thinking in clinical practice. This sequence of courses provides a systematic approach to the physiologic basis for disease. Lectures are focused on the disease processes of organ systems including the female and male reproductive and endocrine systems as well as disease presentations in pediatric and geriatric patients.

### **PHYA 542 – Research Methods**

#### **2 credits**

This course introduces students to fundamental concepts of epidemiology and research design in health and disease. Principles of evidence-based medicine as they relate to key areas of disease prevention, health promotion and therapy are discussed. Community-based issues, problems and solutions are addressed. Students who complete the course will be able to understand and apply basic statistical terms and applications as well as various research design models that appear in current medical literature. Students learn to assess the quality of medical literature research designs to study commonly encountered clinical and community issues. Students will learn to describe the relationship between the medical literature and evidence-based medicine (EBM). This course is cross listed with BIOM 690.

### **PHYA 543 – Evidence-Based Medicine**

#### **2 credits**

This course begins with the importance of evidence-based medicine as it relates to treatment strategies of disorders commonly treated by PAs. Key concepts on how to search, read and decipher various levels of scientific medical literature are covered. The sessions are interactive and prepare students to critically evaluate the clinically relevant issues in a broad range of physician assistant practice areas. Students develop an EBM-style clinical question that will serve as the basis for the Research Practicum completed during the clinical phase of the program.

### **PHYA 549 – Radiology for the Physician Assistant**

#### **2 credits**

This course is an introduction to the field of radiology designed to provide the physician assistant student with basic knowledge of the use and interpretation of a variety of radiographic studies. Through interactive technology, lectures and

case-based problems students will learn to interpret a variety of diagnostic modalities and understand their use in daily clinical practice.

### **PHYA 550 – Family Medicine Preceptorship**

#### **10 credits**

This six-week preceptorship is intended to augment and strengthen the student's skill in developing a comprehensive database and a system approach to common family medicine problems. Emphasis is placed on generating the information and skills to enable the student to recognize normal findings and assess clinically significant deviations from normal. Students perform patient histories and physical examinations, obtain diagnostic testing and present the data to their precepting physician(s) with a proposed differential diagnosis and treatment plan. This preceptorship will assist the student in learning the indications, limitations and methodology of family medicine procedures and therapeutic strategies. Students function in a role similar to the intended role of a practicing physician assistant. Where possible, students participate in grand rounds, noon conferences and clinically relevant didactic presentations. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

### **PHYA 551 – Internal Medicine Preceptorship**

#### **10 credits**

This is a six-week preceptorship that is intended to augment and strengthen the student's skills in developing a comprehensive database and a systemic approach to common internal medicine and family medicine problems. Emphasis is placed on generating the information and skills to enable the student to recognize normal findings and assess clinically significant deviations from normal. Students perform patient histories and physical examinations, obtain diagnostic testing and present the data to their precepting physician(s) with a proposed differential diagnosis and treatment plan. This preceptorship will assist the student in learning the indications, limitations and methodology of internal medicine and family medicine procedures and therapeutic strategies. Students function in a role similar to the intended role of a practicing physician assistant, including participating in teaching rounds where diagnostic and therapeutic plans for acutely ill patients are discussed, performing and observing various clinical procedures and preparing written and oral communication about patients. Where possible, students participate in grand rounds, noon conferences and clinically relevant didactic presentations. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

### **PHYA 553 – Emergency Medicine Preceptorship**

#### **10 credits**

This is a six-week preceptorship that allows the students to augment and strengthen their skills in developing a comprehensive database and a systemic approach to common emergency medicine problems. Emphasis is placed on generating the information and skills to enable the student to recognize normal

findings and assess clinically significant deviations from normal. Students will perform appropriate clinical evaluation including focused patient history and physical examinations, obtain diagnostic testing and present the data to their precepting physician(s) with a proposed differential diagnosis and treatment plan. Students will gain skills that include those necessary for appropriate triage, stabilization of patients with traumatic injuries and illnesses, the management of the less life-threatening problems that present to the emergency room, working with the pre-hospital emergency medical service team and making appropriate secondary referrals. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

### **PHYA 554 – Gynecology/Prenatal Preceptorship**

#### **10 credits**

This is a six-week preceptorship that is intended to augment and strengthen student skills in developing a comprehensive database and a systemic approach to common problems seen in prenatal and gynecology practice. Emphasis is placed on generating the information and skills to enable the student to recognize normal findings and assess clinically significant deviations from normal. Students will perform appropriate clinical evaluation including focused patient history and physical examinations, obtain diagnostic testing and present the data to their precepting physician(s) with a proposed differential diagnosis and treatment plan. This preceptorship teaches the student the indications, limitations and methodology of prenatal and gynecologic procedures and therapeutic strategies. Students will also receive the experience in managing common outpatient gynecology problems, gynecologic diagnostic techniques and therapy, family planning, assisting at gynecologic surgery and techniques for the early detection of gynecologic cancer. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

### **PHYA 555 – General Surgery Preceptorship**

#### **10 credits**

This six-week surgical preceptorship augments and strengthens student skills in developing a comprehensive database and a systemic approach to common problems in general surgery. Students perform appropriate clinical evaluation including comprehensive surgical history and physical examinations, obtain diagnostic testing and present the data to their precepting physician(s) with a proposed differential diagnosis and treatment plan. Students assist in surgical procedures in the operating room, the diagnostic evaluation of surgical patients and with preoperative and postoperative care with the ambulatory care of surgical patients. Proficiency is to be developed in suturing, incision and drainage, excision and the biopsy of simple wounds and lesions. Where possible, students participate in grand rounds, noon conferences and other clinically relevant didactic presentations. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

## **PHYA 556 – Behavioral Medicine and Long Term Care Preceptorship**

### **10 credits**

This six-week preceptorship is split into two sections. Behavioral Medicine will last 4 weeks and Long Term Care will last 2 weeks. The Behavioral Medicine portion involves experiences, primarily in outpatient settings, that allow students to develop skills in the evaluation and management of patients with a variety of psychiatric and addiction problems. Through these experiences, students gain an appreciation for the role of the psychiatrist, psychologist, nurse and social worker in the care of the mentally ill, and become better able to make appropriate psychiatric referrals from primary care. The use of psychoactive pharmaceuticals and the role of psychotherapy in psychiatry are explored. In the Long Term Care portion, students will participate in providing healthcare for the geriatric and long term care patient population in a nursing home setting. This preceptorship allows students to enhance both clinical and communication skills, while providing the opportunity to gain insight and experience in geriatrics and long term patient care. This preceptorship is intended to augment and strengthen the student's deductive reasoning and clinical decision making skills by developing a comprehensive database and a systemic approach to common geriatric medical pathology and the concerns encountered with patients in a long term care facility. Where possible, students participate in grand rounds, conferences and other clinically relevant didactic presentations. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

## **PHYA 557 – Pediatrics Preceptorship**

### **10 credits**

This is a six-week preceptorship for clinical phase PA students that provides inpatient and/or outpatient exposure to a patient population ranging from neonates to late adolescents. This preceptorship will augment and strengthen student skills in developing a comprehensive database and a systemic approach to common problems in pediatrics. Emphasis is placed on generating the information and skills to enable the student to recognize normal findings and assess clinically significant deviations from normal. Students will perform appropriate clinical evaluation including comprehensive history and physical examinations, obtain diagnostic testing and present the data to their precepting physician(s) with a proposed differential diagnosis and treatment plan. The student will have an intense exposure to primary care pediatric problems with the objective of developing skills in well-child preventive care, the care of common pediatric illnesses and the care of the newborn. These experiences are obtained in the outpatient and inpatient setting. A set of learning objectives guides student reading in preparation for a written examination at the end of the preceptorship.

## **PHYA 558 – Elective Preceptorship**

### **6 credits**

This is a four-week preceptorship that offers students an opportunity to complete an elective of their choice. During the didactic portion of the professional phase, PA program students consider their own clinical practice interests and needs for

skill development. Students select a clinical area for their elective with the approval of their faculty advisor. Students develop an individualized learning contract that includes objectives for their elective rotation and a method to demonstrate achievement of these objectives at the conclusion of their preceptorship. Students are responsible for an oral presentation regarding a specific health care topic at the end of their elective preceptorship.

### **PHYA 560 – Research Practicum**

#### **3 credits**

Senior PA students, using the knowledge acquired in prior related courses, are required to ask a clinically relevant question in a clinical discipline common to PA practice. A subsequent search and interpretation of the literature results in the culmination of a year-long project conducting, writing and presenting a systematic review on chosen topics of interest.

### **PHYA 562 – Comprehensive Preceptorship Review**

#### **3 credits**

This course is intended to review and assess the student's knowledge of core competencies. It includes an extensive board-review style lecture series, directed standardized patient encounters with oral case presentations to a faculty member, a written comprehensive examination and clinical skills testing.

## **Master of Science in Organizational Development and Leadership**

### **ODL 501 – Foundations and Systems of Organizational Development**

#### **3 credits**

This course is an introduction to the ODL program. It describes the genesis of organization development and how it has evolved over the last 50 years. Students address the importance of using themselves as an instrument of change by creating their own development program that they will use throughout the entire ODL program. The course introduces a consulting model and several models of organizational change that can be applied immediately to the student's work setting.

### **ODL 502 – Understanding the Business of Organizations**

#### **3 credits**

This course provides needed background to those students who have not experienced the challenge of operating successfully in a business or business unit. The course focuses on how to establish a strategic direction for a business, create the needed organizational structure, develop and lead the operations of the business, monitor financial results and meet the needs of customers, shareholders and employees.

### **ODL 504 – Personal and Professional Development**

#### **3 credits**

This course is an exploration of development from three viewpoints – personal, interpersonal and organizational. Students will examine their own preferences, strengths and motivations as well as the role these play in their relationships. They will assist others in meeting career or personal goals through a mentoring relationship. Topics include feedback, career development, personality preferences, motivation, mentoring, creating a development plan and supporting development in an organization.

### **ODL 505 – Team Dynamics**

#### **3 credits**

This course provides a broad overview of different types of teams in the workplace. Discusses the necessary elements of successful teamwork and how to develop these elements. Explores various team roles with a particular focus on team leadership. Exposes students to real-time team dynamics and provides opportunities for practicing diagnosis and intervention skills.

### **ODL 506 – Social Factors and Cultural Diversity**

#### **3 credits**

Culture is the set of shared attitudes, values, goals and practices that characterizes a community. These communities exist around gender, race, color, age, differently-abled, sexual orientation, class, religion, ethnicity and nationality. This course examines differences that characterize people of various communities and what happens when they come together in organizations. The dynamics of social factors and cultural diversity in organizations will be examined through both theoretical literature and pragmatic experience. The



course will culminate in the development of strategies for engaging people of various cultures more successfully.

### **ODL 507 – Action Research in ODL: Capstone Project Preparation**

#### **3 credits**

This course is intended as preparation and support for the final Capstone project. It reinforces action research as a critical tenet of organization development, leadership and change. The learning experiences will focus on enhancing action research practice and data collection skills to facilitate deeper-level inquiry, reflection, critical thinking and assessment into the issues that are impacting organizational performance and results. As leadership practitioners, students will learn how to appropriately align the methodologies and interventions with the identified organizational issue(s)/problem(s). As a definitive outcome, students will deliver a draft of the beginning sections of the Capstone project.

### **ODL 508 – Leadership for Practitioners**

#### **3 credits**

This course describes the theories of leadership with a focus on practitioner models. Effective leadership skills for organizational change in virtual and networked organizations are evaluated using assessment tools. Leadership values (core and peripheral), perceptions, assumptions, expectations and management style are some of the critical issues discussed and evaluated.

### **ODL 510 – Capstone**

#### **3 credits**

The Capstone course is taken in the last term of the student's master's work. Working with the program director as her/his advisor, the student demonstrates her/his competence in leading organizational change. Students write a theoretical paper describing how they would enter an organization at a level of responsibility one or two levels above their current position; assume their new leadership role; clarify the current organizational or business challenge; and lead the organization to achieve the desired results.

### **ODL 512 – Small and Large Systems: Diagnosis and Change**

#### **3 credits**

This course gives students an understanding of how to diagnose organizational effectiveness and then plan and implement complex change. Change models will be compared and contrasted based on their ability to produce sustainable business results and engage the hearts and minds of employees. The course will focus on the critical success factors in large-scale change efforts, key elements in personal transitions required to make change work and a leader's role in leading change.

### **ODL 513 – Business and Professional Communications**

#### **3 credits**

This course develops a student's skill level in effective writing and oral presentations. With the emphasis on both conceptual and skill areas, this course helps students develop competence in verbal and nonverbal communication, as

well as key writing principles to create effective memos, letters and reports. In addition, students will learn critical success factors that impact oral and face-to-face communication.

### **ODL 514 – Managing Emotional Systems in the Workplace**

#### **3 credits**

This course develops the student's ability to be more effective in leading change in the workplace by increasing the student's ability to manage his or her own emotional reactivity and develop an objective perspective on how emotional systems operate. Students discover their own patterns of reactivity and identify how they can diffuse a toxic situation by changing their own behavior.

### **ODL 515 – Project Management and Strategic Thinking**

#### **3 credits**

The purpose of this course is to provide an overview of project management and its role in strategic management. It will cover the history of strategy development at the organizational level and apply department-level project management. Additionally, the course will address the implications of strategic project management for team dynamics and organizational development. A text is offered as a guide for project completion. Selected articles will be provided as supplemental reading as well as tools for discussion. Upon successful completion of the course, students will have a basic understanding of strategy and a practical comprehension of project management.

### **ODL 516 – Developing Systems Literacy: Organizational Workshop**

#### **3 credits**

#### **(Turbo Course\*)**

The organizational workshop focuses on helping people “see” the systematic conditions in which they live and work. It is a day-long group simulation followed by three days of debriefing. This rich learning experience provides an understanding of what is needed to create powerful human systems – systems with outstanding capacity to perform their functions and carry out their mission. This experience and the related frameworks demonstrate what is now understood about systems. They cast a powerful light on organizations.

### **ODL 518 – Ethical Effectiveness**

#### **3 credits**

This course explores how one can be effective and ethical while operating within an organization. Students will examine the relationships among personal values, organizational systems, action, control, accountability, ethics, power, political savvy, organizational politics, influence and persuasion, trust and credibility. They will explore the role of missions, values, ethics policies, violation reporting systems, current laws and reporting agencies in the promotion of ethical behavior. The connections to issues of diversity, leadership, teams, decision-making, coaching, mentoring and action research will support and emphasize previous learning.

\*Turbo courses are offered on two Friday/Saturday or Saturday/Sunday weekends.

## **ODL 519 – Strategic Change: Planning for Organizational Success**

**3 credits**

**(Turbo Course\*)**

Change may be inevitable, but organizational response to change is not. Understanding the nature of change pressures on the organization and developing an effective strategy for organizational change is critical to the long-term success of that organization. Using a combination of background reading, class orientation and business case review, students obtain a general “strategic business perspective” to change in their overall organization. Key change strategies are reviewed and analyzed in detail, providing a diverse “tool kit” of alternative paths-forward for the leader. Students are asked to apply these new alternatives to their own organizational experience and provide new “thought leadership” to existing challenges of change.

## **ODL 520 – Appreciative Inquiry**

**3 credits**

**(Turbo Course\*)**

Appreciative Inquiry (AI) is a method for discovering, understanding and fostering innovation in systems. AI uses incisive questions to gather positive stories and images leading to the construction of positive possibilities. AI seeks out the very best of “what is” to help ignite the imagination of “what could be.” The aim is to generate knowledge in such a way as to identify important values, expand the “realm of the possible,” help the system envision a desired future, and encourage the successful translation of these values into practice and these images into reality.

\*Turbo courses are offered on two Friday/Saturday or Saturday/Sunday weekends.

## Master of Science – Counseling and Clinical Health Psychology (Addictions and Offender Counseling Track)

### **HPSY 501 – Neuropsychopharmacology of Substance Abuse**

#### **3 credits**

This course presents an overview of the biological and neurochemical bases of addiction, with a specific emphasis on the brain mechanisms responsible for the actions of addictive substances.

### **HPSY 502 – Introduction to the Psychology of Substance Use Disorders**

#### **3 credits**

This course presents an overview of psychological theories of substance use disorders, with particular emphasis on the research bases for those theories. Traditional 12-step theories will be covered as well as behavioral and psychodynamic theories.

### **HPSY 503 – Psychology of Offenders and Offender Change**

#### **3 credits**

An introductory overview of psychological theories of offending and offender change. Emphasis will be placed on empirically validated approaches to initiating change in offenders.

### **HPSY 504 – Assessing and Treating Substance Use Disorders**

#### **3 credits**

The course will present a broad discussion of both traditional empirically validated methods for assessing substance use disorders and effectively treating those disorders. Particular emphasis will be placed on behavioral and cognitive-behavioral approaches.

### **HPSY 505 – Motivational Interviewing**

#### **3 credits**

This course will present both theory and practice of motivational interviewing, an empirically validated approach for helping clients initiate healthy behavior changes. Using lecture, demonstration and role plays, participants will learn how to do an effective motivational interview.

### **HPSY 506 – Child, Adolescent and Family Issues in Substance Use Disorders**

#### **3 credits**

Substance misuse affects a broad range of ages and particularly has an impact on families. This course will review empirically validated approaches to working with children, adolescents and families to reduce the negative consequences of substance misuse. Particular emphasis will be placed on family involvement in the motivation and support of treatments for substance-misusing clients.

**HPSY 507 – Addictions and Correctional Psychology: Integrating Seminar  
3 credits**

This advanced seminar will be used as a forum for practicum students to integrate information from coursework into their practicum work. The emphasis will be on effective use of research and clinical literature in designing and implementing intervention programs for persons with substance use disorders who may also be offenders.

## Master of Science – Counseling and Clinical Health Psychology

### **PSY 501 – Theories of Personality**

#### **3 credits**

This course surveys the various theories of personality and the models of psychotherapy that stem from them. The interaction and effects of forces that influence personality development will be explored.

### **PSY 502 – Behavioral Change in Health Psychology**

#### **3 credits**

This course involves applying learning principles and environmental control to behavioral change in health-related areas. The emphasis is on founding principles, techniques and assessment methods of modification.

### **PSY 503 – Psychopathology**

#### **3 credits**

This course consists of an advanced study of abnormal human behavior. It covers the etiology, symptomatology, incidence, assessment, treatment and prognosis of the major psychological disorders. Current and recent theoretical approaches and research findings relevant to the etiology and treatment of these disorders will be presented.

### **PSY 504 – Group Therapy**

#### **3 credits**

This course traces the major theoretical orientations in group psychotherapy. Students will learn to apply group approaches to the treatment of mental and medical health problems.

### **PSY 505 – Clinical Assessment in Health Psychology**

#### **3 credits**

This course covers the history and theories of clinical assessment as they apply to various areas of health psychology. It includes an introduction to clinical interviewing and the development of clinical hypotheses and treatment conceptualizations based on available data.

### **PSY 506 – Foundations of Psychotherapy**

#### **3 credits**

Theoretical considerations, principles and problems in cognitive behavior therapy (CBT) and other empirically validated procedures are covered in this course. It is designed to provide an introduction to the basic skills used in psychotherapy generally and CBT specifically.

### **PSY 507 – Social Psychology and Multicultural Competence**

#### **3 credits**

This course presents an overview of health and social problems at individual, group, institutional and societal levels. It will also provide an overview of the knowledge, skills and attitudes necessary to understand, communicate with and treat culturally diverse populations.

## **PSY 508 – Developmental Psychology**

### **3 credits**

This course consists of a comprehensive survey of the theory and research concerning the physical, cognitive, emotional, behavioral and social aspects of development. It covers the study of the psychology of the growing person from conception through the elder years.

## **PSY 509 – Tests and Measurements**

### **3 credits**

This course covers the tests and measurement tools used in contemporary psychology with special emphasis on intellectual and personality variables. Critical concepts and strategies in psychological testing including standardization, reliability, validity and test selection are discussed.

## **PSY 510 – Professional, Legal and Ethical Issues**

### **3 credits**

The professional and ethical issues confronting the counseling psychology professional in mental health and behavioral medicine are the focus of this course. It emphasizes appropriate management of common legal and ethical dilemmas encountered in clinical practice.

## **PSY 551 – Physiology, Health and Psychology**

### **3 credits**

Normal functions of the human body are explored with an emphasis on understanding chronic medical conditions and communicating with medical personnel. This course emphasizes applications of psychological principles to health care that may promote wellness, foster healing and affect treatment outcome.

## **PSY 552 – Program Evaluation, Research Methods and Statistics**

### **3 credits**

Statistical analysis and research design in psychology are covered including sampling, measurement, hypothesis development and testing, and interpretation of results. This course is designed to teach program evaluation and research methods in psychology while providing the student with a hands-on approach to collecting and analyzing data.

## **PSY 553 – Clinical Health Psychology: Integrating Seminar**

### **3 credits**

Advanced training in the application of psychological theory and techniques to clinical cases. This course integrates the coursework and clinical experiences gained throughout the MS program.

## **PSY 561 – Practicum I 3 credits**

## **PSY 562 – Practicum II 3 credits**

## **PSY 563 – Practicum III 3 credits**

A year-long sequence of applied clinical work will promote the development of clinical skills and the integration of psychological theory with real-world

experience. In addition, there will be intensive supervision and literature reviews tailored to the student's experiences provided in a weekly seminar.

Prerequisites: PSY 503, PSY 505, PSY 506 and PSY 510

**PSY 571 – Career and Lifestyle Development**

**3 credits**

This course provides an understanding of career development, theories, decision-making models and related life factors. Students will also be introduced to career counseling processes, techniques and resources.



## Certificate – Applied Behavioral Analysis

### **PSY 580 – Basic Principles of Applied Behavior Analysis**

#### **3 credits**

This course is a basic overview and introduction to applied behavior analysis. The topics covered include the history of applied behavior analysis; critical theories and principles, processes and concepts of learning; underlying assumptions and constructs of the applied behavior analysis model; behavioral analysis as an applied technology; the learning-based model of psychopathology; ethical principles in the practice of applied behavior analysis. Prerequisite for all subsequent courses.

### **PSY 581 – Behavioral Assessment and Functional Analysis of Behavior**

#### **3 credits**

This course is a comprehensive overview of the principles and practice of behavioral assessment and the functional analysis of behavior. Topics include behavioral assessment methods; behavioral observation and self-monitoring; the process of conducting a thorough and useful behavioral assessment of problematic behaviors; the step by step approach to conducting a functional analysis of behavior; single subject experimental designs for assessing outcomes and experimental evaluation of interventions; measurement of behaviors; graphic display and reporting and interpreting of behavioral data and outcomes; reliability assessment; ethical issues in behavioral assessment. Prerequisite for all subsequent courses.

### **PSY 582 – Behavior Modification in Applied Settings**

#### **3 credits**

This course is a comprehensive overview of basic behavioral interventions designed to alter dysfunctional behaviors in clinical and educational settings. Topics include the selection, development, implementation and evaluation of intervention outcomes and strategies including behavior management plans, behavioral procedures for increasing and decreasing behaviors; self-management plans, and contingency management programs; treatment integrity assessment; data-based decision making; systems support mechanisms, and ethical issues in the design and application of behavioral interventions. Prerequisite for all subsequent courses.

### **PSY 583 – Clinical Applications of Applied Behavioral Analysis**

#### **3 credits**

This course provides an application of applied behavioral approaches to a variety of common problems in clinical and educational settings. Evidenced-based, “best practices” approaches for a variety of problems are reviewed. Topics include assessment and intervention paradigms for challenging and problematic behaviors; addressing barriers to effective implementation; strategies for maximizing the impact of behavioral programs; identifying and utilizing system support; promoting generalization and maintenance of behavior change; relapse prevention and ethical considerations. Prerequisite for final course.

## **PSY 584 – Integrating Seminar in Applied Behavioral Analysis**

### **3 credits**

This final course in the sequence focuses upon current and advanced topics in applied behavior analysis. The most recent advances related to assessment, functional analysis, treatment, evaluation, and standards of professional practice, ethical and legal considerations will be reviewed. Extensive discussion of cases from the literature and practices of the participants will be analyzed and reviewed.

## *Certificate – Advanced Graduate Studies*

### **PSY 575 – Cognitive Behavior Therapy**

#### **6 credits**

This course focuses on the theoretical, historical, philosophical and technical bases of cognitive behavior therapy. Specific treatments for various psychological disorders will be reviewed, and clinical skills will be developed through the discussion of case presentations. This course is a year-long course that is registered in the Fall.

### **PSY 576 – Cognitive Behavior Therapy – Advanced Seminar**

#### **3 credits**

Experienced clinicians who are familiar with the cognitive therapy model will have the opportunity to present, review and discuss cases dealing with cognitive and behavioral issues such as conceptualization, intervention and follow-up. Participants are expected to be actively involved in clinical practice.

## **Special Graduate Programs – Philadelphia Campus**

### **PSY 901 – Dealing with Disabilities in Education**

#### **3 credits**

This course is targeted toward school administrators and counselors. The week will provide a thorough examination of disability law, ADA, Section 504 and the impact of such regulations on schools and educational leaders. The program will be interdisciplinary and will also provide a basis in medical and psychological disabilities presented by physicians, psychologists and psychiatrists. Testing for ADHD and other learning disabilities will be fully explored.

### **PSY 903 – Short Term Counseling Interventions: The Cognitive Behavioral Model**

#### **3 credits**

Intended for school psychologists and counselors, the week will introduce elements of the cognitive behavioral model to provide a new perspective and counseling skills set for participants. The focus will be on short term interventions and will present the essentials of cognitive behavioral theory, strategy and techniques. An exploration of personality disorders in children and adolescents will be featured. The teaching format will be lectures, video demonstrations and case discussions.

### **PSY 905 – School-Based Mental Health Practice**

#### **3 credits**

School personnel (e.g., teachers, school psychologists, school mental health workers, school counselors, school administrators) are increasingly being called upon to address the emotional and behavioral needs and problems faced by children. In an effort to meet these challenges and to provide effective interventions, educators must have the knowledge needed to provide effective evidence-based practice. Learn about the newest approaches from leaders in the field.

### **PSY 906 – Classroom Behavior Management**

#### **3 credits**

Unruly behavior problems on the part of a small number of students in the classroom often undermine the learning of other students and cause significant frustration for teachers. During this week long course, the participants will learn the Functional Analytic Model, an evidenced-based approach, designed to alter dysfunctional behavior. Participants will understand a model for identifying and defining the specific characteristics of problematic target behaviors, developing behavior assessment strategies, delineating triggering events and conditions that become occasions for problem behaviors to occur, determining factors that maintain problematic behaviors, identifying positive behavior alternatives that are incompatible with problem behaviors, constructing a functional analytic conceptualization of classroom behavior problems, designing effective intervention strategies, and evaluating the impact of behavior interventions. Participants will have ample opportunity to discuss actual cases from their own classrooms and to design behavioral assessment and intervention strategies.

## Master of Science – School Psychology

### **SPSY 501 – Professional School Psychology**

#### **2 credits**

This course introduces students to school psychology as a profession, from both theoretical and applied perspectives. Alternative roles and functions associated with the practice of school psychology are reviewed, with emphasis on contemporary issues associated with training and service delivery. Class discussions address the domains of training and practice identified in *School Psychology: A Blueprint for Training and Practice II* (NASP, 1997). In addition, attention is given to historical trends and considerations for the future of the profession.

### **SPSY 502 – Theories of Personality**

#### **3 credits**

This course provides an overview of the nature of personality theory and the interaction/effects of forces that influence personality development. Theories of personality selected explore the influence on school practice and psychological research. Freud, Adler, Jung, Murray, G.W. Allport, Rogers, Maslow, Fromm; some existentialists and some social, behavioral or learning approaches are included.

### **SPSY 503 – Introduction to Research and Data Analysis**

#### **3 credits**

Course objectives are to understand the basic research designs and the methodological issues in formulating, planning, designing, and implementing, analyzing and interpreting the results of research investigations, as well as ethical and cultural issues. The class format is a mixture of lectures, discussions, and “hands-on” exercises that will allow students to become familiar with the techniques involved in performing research.

### **SPSY 503B – Introduction to Multicultural School Psychology Research Seminar**

#### **2 credits**

This course follows from the Introduction to Research and Data Analysis course with an emphasis on multicultural research topics. The course provides students with an opportunity to apply previously learned research skills into developing an idea for a multicultural research project and writing a formal research paper according to APA requirements. Although students do not actually conduct the research, they are required to select a multicultural issue or area of interest and, through a comprehensive review of the literature, develop research questions and hypotheses that they would like to investigate and decide on appropriate statistical tests to analyze findings. The course format is seminar style, where students are provided small group sessions and individual coaching sessions, as needed.

## **SPSY 504 – Developmental Psychology**

### **3 credits**

This course explores child development from conception through early adulthood, including growth, adaptation and developmental patterns with implications for academic, emotional and social learning. Also, there is a special emphasis on research concerning the development of pro-social behavior, internalization, and gender and moral development as well as the influence of culture and socioeconomic status.

## **SPSY 505 – Tests and Measurements**

### **3 credits**

Tests and measurements is a course dealing with basic concepts in the selection, administration, scoring and interpretation of educational and psychological tests commonly used in the field of school psychology. Psychometric concepts such as validity and reliability will be examined as will methods for evaluating the quality and technical adequacy of testing instruments. Students will increase their understanding of tests designed for assessing cognitive, neuropsychological, academic and social-emotional functioning. Procedures for interpreting and communicating test results will be introduced and issues related to the social, legal and ethical aspects of assessment will be explored. Lectures, class discussions, student presentations and readings will be used. Student performance will be evaluated via a quiz, a final examination and two paper assignments.

## **SPSY 506 – Physiology, Health and Psychology**

### **3 credits**

This course is designed to introduce the students to structures and functions of the brain and central nervous system and the influences on human behavior and learning. Neurodevelopmental disabilities, assessment, intervention with children and youth at home and school are among the topics covered.

## **SPSY 507 – The Exceptional Child: Psychological/Educational Implications**

### **3 credits**

This course is designed to provide a basic knowledge base about development that allows the student to understand atypical development. In doing so, the student will be introduced to a wide variety of developmental disabilities and become sensitized to the implications of these disabilities when working with children and their families. In addition, the student will cover a wide range of developmental disabilities, including learning disabilities, cognitive disabilities, pervasive development disabilities, sensory disabilities, communication impairments and traumatic brain injuries. The course will use lectures, discussions, videotapes, student presentations and guest speakers to provide a comprehensive learning experience.

## **SPSY 508 – Foundation of Psychotherapy**

### **3 credits**

The major theoretical approaches to psychotherapy with children and

adolescents will be reviewed with special consideration of developmental, social, personal and cultural factors and the applications of techniques in school settings. The course is designed to provide an introduction to the basic skills used in psychotherapy generally and cognitive behavior therapy (CBT) specifically to deal with social and emotional problems frequently encountered in school-age children. Research focusing on treatment outcome as well as case material will be reviewed. Ethical considerations in the psychotherapeutic treatment of children will also be discussed.

### **SPSY 510 – Learning: Theory and Application**

#### **3 credits**

This course provides an overview of current knowledge in the field of learning including the application of learning theory through the educational process. Basic theories/principles will be described and supplemented with contemporary studies. Topics will include cognitive approaches and mental processes including such areas as perception, reasoning, problem-solving, language, imagery and decision-making. Special emphasis will be placed on applications in areas such as education, school psychology and counseling. Lectures, class discussion and reading are used.

### **SPSY 511 – Curriculum Instruction and Educational Leadership**

#### **3 credits**

The focus of this course is to introduce students to the fundamentals of school-based curriculum including current issues and research. Students will explore current empirically based components of effective instruction and alternative instructional methods for use with students with diverse backgrounds, experiences and needs. A focus of this course will be on the role of the school psychologist as a leader in development and evaluation of appropriate and effective learning programs for all children. School psychologists must also be prepared for their role as educational leaders. Issues of team building, skills for organizing change and effective communication will be highlighted.

### **SPSY 551 – School Psychology Practicum Field Experience Seminar**

#### **2 credits**

The course provides advanced training in the application of psychological and educational theory and foundations of practice for children in school settings. The dual focus of the practicum experience at the MS level is on orientation to school settings, particularly with regard to working with multidisciplinary teams, and on curriculum-based measurements. This experience provides an integration of the coursework and the clinical/field experience gained in the program. In addition, there will be supervision, discussion of relevant issues and literature reviews during class sessions. APA and NASP ethical practice and guidelines and standards are discussed as applied to best practice. Primarily classroom discussion and some lectures are used. Students bring case reviews and general experiences to class for discussion. In addition, students are required to keep a portfolio to document experiences and learning throughout the practicum. This includes practicum logs, supervision notes, supervisor and self-

evaluations, ethical and legal issues/practice, behavioral assessment activities, observations, professional interviews, research journal readings, technology, and other relevant traineeship experience.



## **Educational Specialist – School Psychology**

### **SPSY 509 – Cognitive Behavior Therapy in the Schools**

#### **3 credits**

The primary goal of this course is to introduce students to the provisions of school-based mental health services from a cognitive-behavioral perspective. The course begins with an introduction to cognitive-behavior therapy (CBT) including its history and basic theoretical tenets. The structure of the class will then build upon theory to a model progressing from assessment and case conceptualization to intervention selection and implementation. The issues revolving around the standards of treatment and quality of care will be addressed. Students will further learn specific techniques and interventions for a variety of child and adolescent issues presented in school settings, such as school refusal, aggressive behavior, student underachievement, ADHD, anxiety, depression and substance abuse. Developmental, multicultural and ethical considerations will be reviewed and discussed. Skills will be developed through case conceptualizations and case discussions as well as role play scenarios.

### **SPSY 513 – Assessment I: Cognitive Assessment**

#### **3 credits**

This course addresses both theory and diagnosis of cognitive assessment and identifies the relevant issues/criticisms related to intelligence testing. Students acquire skills in the selection of a broad range of methods for assessing, administering, scoring (including computer scoring), interpreting (including computer printouts), reporting and communicating results of evaluation data on children's cognitive ability and functioning to answer educationally relevant questions. This occurs through developing skills in assessing, observing, interviewing and record and portfolio reviews. Assessment for intervention and outcome will be applied using traditional intelligence testing using Wechsler scales, WPPSI-III, WISC-IV, WAIS-III, Stanford-Binet V and Adaptive Behavior Measures. Through lectures, labs and practice cases, students gain technical skills with these instruments.

### **SPSY 514 – Multicultural Issues in Psychology**

#### **3 credits**

This course is part 2 in a sequence of 3 courses focusing on multicultural issues in the field of school psychology. The intent of this course is to present a detailed overview of the complex issues and methods that will serve as a guide to developing multicultural competence, i.e., understanding diversity from a historical, sociological, developmental, educational and psychological perspective. Students are introduced to significant aspects of other cultures while examining their own experiences and developing personal awareness and appropriately applying knowledge to skill-based practices in school settings in order to promote a positive impact on school achievement, self-esteem and personal growth of all children. In addition, students will learn to administer an array of non-verbal and culturally-fair assessments and learn how these tests, in conjunction with traditional assessments, inform the practice of school psychology.

## **SPSY 515 – Assessment II: Psychoeducational Assessment of the Exceptional Learner**

### **3 credits**

This course is designed to introduce school psychology educational specialist graduate program students to individualized educational assessment practices and their links to educational interventions. The course will address the assessment of the educational needs of exceptional learners with primary emphasis on the basic skill areas of reading, written expression and mathematics.

## **SPSY 516 – Educational Research and Program Evaluation**

### **3 credits**

This course prepares students to participate in program planning and evaluation activities, emphasizing both traditional and newly emerging approaches. The course examines how to plan, implement and evaluate school-based programs. Emphasis is placed on translating research into practice through implementation and evaluation of empirically supported programs and practices. Attention is given to monitoring student progress, at both individual and program levels. Course methods include readings, lectures, class discussions and completion of an applied project.

## **SPSY 517 – Academic and Behavioral Interventions**

### **3 credits**

Students focus on defining current problem areas, strengths and needs of school-age children using informal assessment measures such as observations, interviewing, work samples, curriculum-based assessment (CBA), DIBELS, and functional behavioral assessments (FBA). Additionally, students obtain knowledge of using these informal assessment measures as a means to assess progress of evidence-based academic and behavioral interventions in order to determine a student's response to intervention (RTI). Readings, lectures, class discussions, cooperative learning groups and labs are used as methods of instruction.

## **SPSY 518 – Assessment III: Personality and Behavior**

### **3 credits**

This is the final course in the assessment sequence, which focuses on the assessment of emotional, social, adaptive and behavioral issues of school-age children. Various formal and informal means of assessment are reviewed including self-report measures, projective assessments, interview and functional behavioral assessment (FBA). Additionally, a cognitive-behavioral therapy model is offered for case conceptualization and treatment or intervention planning.

## **SPSY 519 – Consultation and Collaboration in Educational Settings**

### **3 credits**

This course provides an exploration of consultation theory and practice including evaluating the efficacy of the interventions. Students achieve proficiency in implementing academic/mental health/behavioral consultation models (e.g., Conjoint Behavioral Consultation) and become familiar with other

consultative models for providing services to individual clients. Indirect methods of intervention are explored through different approaches to consultative services for teachers, parents, administrators and other professionals to promote change at the levels of the individual students, classroom, building, district and/or other agency levels. School psychology students gain knowledge of the important features of collaborating effectively with others in planning and decision making. Also, emphasis is placed on teaching students effective communication skills, with an emphasis on understanding individuals of diverse backgrounds and characteristics. This course incorporates readings, lectures, class discussion and role-plays.

### **SPSY 520 – Effective Prevention and Crisis Intervention at Home and School**

#### **3 credits**

Based on knowledge of current theory and research about the development of academic, behavioral and emotional issues in children, this course focuses on effective prevention strategies, as well as methods to develop, implement and evaluate programs that help prevent student difficulties at both home and school. This course also addresses crisis intervention ways to provide services in the aftermath of crisis. Readings, guest speakers and student presentations are used as methods.

### **SPSY 521 – Health Psychology and Medicine Applied to Schools**

#### **3 credits**

This course focuses on the relationship between physical and mental health and its impact on learning and adaptive functioning of children in school and at home. Assessment and treatment issues are emphasized. Topics addressed include coping with chronic illness, sexual health, chronic pain, eating disorders, teenage pregnancy, AIDS prevention, stress management and other related issues.

### **SPSY 552 – Practicum Seminar in School Psychology I: Family-School Partnerships**

#### **2 credits**

In conjunction with coursework, students complete a year-long practicum sequence in the schools during the second year of the EdS program. This field experience is focused on professional intervention practices including assessment, consultation, counseling, informal assessment, and academic and behavioral interventions. The school-based practicum is accompanied by a seminar intended to provide students with additional supervision and didactic training. Seminar discussions will include, but not be limited to, report writing, interventions and outcomes as well as ethical, legal and professional issues in the delivery of school psychological services. The focus of the Practicum I seminar is on establishing effective home-school relationships within the context of school psychological service delivery.

## **SPSY 553 – Practicum Seminar in School Psychology II: School Structure and Organization**

### **1 credit**

In conjunction with coursework, students complete a year-long practicum sequence in the schools during the second year of the EdS program. This field experience is focused on professional intervention practices including assessment, consultation, counseling, informal assessment, and academic and behavioral interventions. The school-based practicum is accompanied by a seminar intended to provide students with additional supervision and didactic training. The Practicum Seminar II focuses on school structure and organization, with emphasis on implementation of school-wide problem solving models for identifying and addressing students' academic and social/emotional/behavioral needs.

## **SPSY 554 – Practicum Seminar in School Psychology III: Applied Law and Ethics**

### **3 credits**

In conjunction with coursework, students complete a year-long practicum sequence in the schools during the second year of the EdS program. This field experience is focused on professional intervention practices including assessment, consultation, counseling, informal assessment, and academic and behavioral interventions. The school-based practicum is accompanied by a seminar intended to provide students with additional supervision and didactic training. The Practicum Seminar III emphasizes legal and ethical issues inherent in the practice of school psychology.

## **SPSY 561, 562, 563 – School Psychology Internship Seminar I, II, and III**

### **3 credits each term**

This year-long internship and bimonthly college-based seminar serves as the culminating training experience, the Specialist Level Certification School Psychology Program. It is a comprehensive experience through which the interns are required to integrate the knowledge base and applied skills of school psychology in promoting positive educational and mental health practices in resolving individual, group and system-level problems. The experience is designed to provide students with supervision and information on a variety of professional topics and issues. The course will provide students with a forum for sharing their field-based experiences and allow for case reviews of assessment, consultation and counseling in which the interns are professionally involved. Internship experiences include advanced psychoeducational assessment and interpretation with emphasis on intervention strategies and program planning, intensive case analysis and treatment planning, and exploration of ethical and legal dilemmas involved in the delivery of psychological services.

## Doctor of Psychology – School Psychology

### **SPSY 620P – Practicum in Preschool Assessment and Consultation**

#### **1 credit**

This course is designed to provide a hands-on approach to working in a preschool environment. The students will have an opportunity to work with children from birth to five years of age. Students will be given the opportunity to observe in preschool classrooms, conduct an assessment using the Bayley Scales of Infant Development-II, consult with preschool teachers and primary care physicians, provide interventions, and participate in didactic sessions on topics relevant to preschool psychology.

### **SPSY 620 – Preschool Assessment and Intervention**

#### **3 credits**

This course is designed to provide classroom sessions to discuss topics of interest to professionals working in preschool settings. A wide variety of topics will be discussed including preschool assessment instruments, positive behavior management with young children, play development, language development, and working with special needs children in a preschool setting. Case studies will be required and presented as part of the classroom sessions.

### **SPSY 630 – Psychometrics**

#### **3 credits**

This course provides doctoral students with the historical, theoretical, and mathematical foundations of psychometrics and psychological measurement. Students will acquire advanced theoretical knowledge necessary to understand and utilize psychometric principles, techniques and measurement skills. Emphasis is placed on helping students identify the strengths and limitations of different psychometric approaches to psychological measurement, including classical and modern test theory and measurement principles. Using both psychometric and psychological theory, students individually research, develop, pilot, and/or administer a psychological measure for subsequent evaluation of its psychometric integrity, and then synthesize their empirical findings into group projects for subsequent scientific presentation. Laboratory assignments using collected data and SPSS statistical software will help students become aware of the psychometric characteristics and limitations of their instruments and the application of test theory principles and techniques. Through lecture, laboratory work and assignments students will demonstrate competency in the area of the scientific foundations of psychometrics in psychology.

### **SPSY 631 – Ethics and Professional Issues in Psychology**

#### **3 credits**

(formerly PSY 631)

The purpose of this course is to promote student knowledge about theory, research and practice pertaining to major issues in psychology. Students will become familiar with the APA and NASP Code of Ethics. Particular emphases are conceptual, professional, legislative, and legal and ethical issues, and

emerging problems and opportunities in school psychology.

### **SPSY 632 – Developmental Psychopathology**

#### **3 credits**

(formerly PSY 632)

By integrating a lifespan approach with the development of psychopathology, this course stresses the bilateral interaction between normal and abnormal development. This course will address the issues from birth throughout the adult years.

### **SPSY 633 – History and Systems**

#### **3 credits**

(formerly PSY 633)

This course is designed as an overview of the history of psychology in the Western world. The task will include a historical developmental approach to origins and changes of ideas over time, the study of great persons and schools of thought, and a look at the Zeitgeist of each. Students will examine the nature of psychology and school psychology as a whole, and the influences of philosophical worldviews in areas such as epistemology, ontology, teleology, and axiology. This course is structured to allow students to (re)evaluate their own assumptions and theoretical foundations.

### **SPSY 634 – Multicultural Community School Psychology**

#### **3 credits**

(formerly PSY 634)

This is the final course of a three-part sequence on multicultural issues in school psychology. The course is designed to provide students with an understanding of ways in which culture pervades and interfaces with school, society and community services to children. Students will learn how various multicultural-oriented theories and research are translated into programs that promote prevention and change as they relate to children, families and communities. Emphasis will be placed on linkages between schools and community resources. Working with families from different ethnic backgrounds will enhance the students' knowledge about cultural competence. Students will be required to conduct field-based experiences by working in urban/suburban/rural school and mental health settings.

### **SPSY 635 – Advanced Assessment and Prevention/Intervention**

#### **3 credits**

(formerly PSY 635)

This course is designed to help refine the assessment skills of psychologists who are familiar with the essentials of psychological and psychoeducational assessment with children, adolescents, and young adults, and to help establish the links between prevention efforts, effective assessment and effective interventions and intervention planning for students. Multicultural issues in prevention, assessment, and intervention will be discussed. Ethical considerations in prevention, assessment, and intervention practices also will be addressed.

## **SPSY 635P – Practicum in Advanced Assessment and Prevention/Intervention**

### **1 credit**

This practicum experience is provided in conjunction with the courses SPSY 691 Cognitive and Affective Bases of Behavior and SPSY 635 Advanced Assessment and Prevention/Intervention. The presentation of content in the two courses has been arranged in a manner that enables students to apply what they learn in the courses directly in their practicum experience. This course provides an opportunity to complete a minimum of 50 hours of supervised practical experience in advanced assessment and prevention/intervention.

## **SPSY 636 – Cognitive Behavior Therapy I**

### **1 credit**

(formerly PSY 636)

The primary goal of this course is to introduce the student to the history, philosophy and conceptual model of cognitive therapy. This is the first course in a two-course sequence.

## **SPSY 637 – Cognitive Behavior Therapy II**

### **2 credits**

(formerly PSY 637)

The primary goal of this course is to build upon the theories and techniques of the introductory course by addressing the practice issues around models of treatment for children in schools and mental health systems. It will include empirically validated treatment models using both modular treatment approaches and manual-based approaches. The use of CBT case conceptualization and treatment for various childhood disorders will be taught. This is the second course in a two-course sequence.

## **SPSY 638 – Cognitive Behavior Therapy III: Practicum**

### **2 credits**

(formerly PSY 638)

This course is designed to integrate clinical application with theory. This practicum experience is provided in conjunction with SPSY 636 and SPSY 637. Skills will be developed through case conceptualization presentation and discussion of actual cases. This course provides an opportunity to complete a minimum of 50 hours of supervised practical experience in cognitive behavior therapy.

## **SPSY 640 – Social Psychology and Group Process**

### **3 credits**

(formerly PSY 640)

This course is designed to help the student understand basic principles and concepts of psychology related to the behavior of individuals in social contexts. Special emphasis is placed upon concepts and theories related to group process.

## **SPSY 641 – Applied School Neuropsychology**

### **3 credits**

This course provides students with an overview of learning disorders from a neuropsychological perspective. Students examine the neuropsychological basis of childhood disorders for both identification and service delivery purposes. As the field of learning disorders is diverse, the course emphasizes criteria and content that have an established empirical base. Students will apply their knowledge of the causes and theoretical constructs of learning disorders through didactics, readings, group discussions and case study exercises. Knowledge of psychological assessment and brain structure and function is required.

## **SPSY 641P – Applied School Neuropsychology Practicum**

### **2 credits**

This practicum experience is provided in conjunction with course SPSY 641 Applied School Neuropsychology. The presentation of content has been arranged in a manner that enables students to apply what they learn in the courses directly in their practicum experience. This course provides an opportunity to complete a minimum of 50 hours of supervised practical experience in school neuropsychology.

## **SPSY 644 – Consultation in Home, School and Community Settings**

### **2 credits**

This course is intended to be an extension of the knowledge and skills acquired in school-based consultation at the specialist level of preparation. Students will develop advanced skills for engaging parents and teachers in collaborative problem solving efforts to address concerns with children's learning and behavior. In addition, the course will address strategies for working with community agencies as partners in addressing school-based problems.

## **SPSY 645 – Issues in Supervision**

### **1 credit**

This course addresses current topics related to the supervision of psychological services in schools and other settings. Theoretical approaches to supervision will be discussed, with emphasis on a cognitive-behavioral model. The primary focus of the course will be on supervision of services provided to children and adolescents.

## **SPSY 646 – Physiological Bases of Behavior**

### **3 credits**

This neuroanatomy and neurophysiology course is designed to provide students with advanced knowledge about the structure and function of the human nervous system. Topics will include an in-depth analysis of the biochemical, physiological, neurological, and neuropsychological influences on human behavior, with content presented through readings, lecture, wet lab, neuroimaging, and neuroanatomy drawing. Although focus is on typical brain development and functioning, this orientation will be contrasted with neuropathology for a better understanding of typical and atypical brain



functioning. This course also will expose students to a wet lab training experience, including examination of brain cuttings and neuroimaging findings to foster discussion of brain structure and function. Basic understanding of the biological bases of behavior is a prerequisite for this course.

### **SPSY 647 – Neuropathology**

#### **3 credits**

This course provides an overview of genetic and acquired brain disorders. The course will provide students with an understanding of the biological bases of the disorders, how neurological and neuropsychological evaluation can help identify associated characteristics and how interdisciplinary teamwork can lead to optimal treatment outcomes for children with these conditions. Disorders include genetic disorders, birth injury, traumatic brain injury, seizure disorders, brain tumors, metabolic disorders, infectious disorders, and neurotoxic disorders. Frontal-subcortical circuit function and neuropsychopathology will also be addressed. Case studies will highlight the need for differential diagnosis and individualized intervention.

### **SPSY 681 – Psychopharmacology**

#### **1 credit**

This course emphasizes understanding of current pharmacological strategies in treating psychiatric disorders. The course will rely heavily on case presentations by the instructor, from the text, and by the students. Economic, political, and cultural factors affecting the use of medicines and other psychoactive substances will be discussed. Students will explore the main effects, side effects, and synergistic effects of both psychopharmacologically specific and other medically prescribed drugs and their interactions with the physical systems.

### **SPSY 682 – Group and Family Therapy with Children and Adolescents**

#### **3 credits**

(formerly PSY 682)

This course is designed to provide the student with a functional understanding of group and family dynamics from a variety of theoretical schools, including psychodynamic, structural, cognitive-behavioral and transpersonal approaches. Classes will be divided into didactic and experiential components with an end goal of enhancing student ability to integrate content and process as dictated by the developmental level of the child and of the developmental stage of the treatment.

Prerequisites: SPSY 636, SPSY 637 and SPSY 638

### **SPSY 683 – Research I: Design and Methods**

#### **3 credits**

(formerly PSY 683)

This course is designed to teach doctoral students the fundamental principles of scientific methodology as applied to psychology and education. The course is intended to provide doctoral students with the ability to be critical consumers of research in the field of school psychology, to enable them to think scientifically



**SPSY 689 – Elective** (formerly PSY 689)

**SPSY 690 – Dissertation Seminar I, II, III**

**2 credits each term**

**Total credits 6**

(formerly PSY 690)

The purpose of this course is to promote student knowledge of and support during the dissertation process. Students will meet for class, as well as individually with dissertation committee members in order to facilitate the completion of all the steps leading to proposal and final approval of the dissertation.

Prerequisite: successful completion of comprehensive exam

**SPSY 691 – Cognitive and Affective Bases of Behavior**

**3 credits**

(formerly PSY 691)

This course is designed to acquaint students with the cognitive and affective processes that underlie how children and adults perceive, feel, think, learn, remember, and behave. Discussions will explore theoretical, conceptual, empirical and clinical issues in order to better understand cognitive-affective-behavioral interactions inherent in all humans as well as how cognition, affect, and behavior vary from culture to culture and in different contexts. Areas covered will include sensation and perception, emotion, cognitive abilities, executive functions and basic cognitive processes, lexicons, strategies, skills, and memory capacities.

**SPSY 692 – Dissertation**

**1 credit**

After completion of Dissertation Seminar III, students continue to work on the completion of their doctoral thesis and meet with Dissertation Committee members to complete all the steps through final approval. Students register for this course each and every term until they have successfully defended their final dissertation thesis.

## Doctor of Psychology – Clinical Psychology

### **CPSY 600 – Independent Study**

### **CPSY 601 – Learning Theories**

#### **3 credits**

This course is designed to provide an overview of theories of learning and critical concepts and constructs related to human learning. Consideration is given to basic principles and laws of learning and how they apply to understanding and predicting human behavior. Clinical applications of learning theory and research are reviewed.

### **CPSY 603 – Behavioral Medicine**

#### **3 credits**

This course is designed to provide an overview of essential content for the preparation of clinical psychologists practicing in primary care and other related medical settings. Particular emphasis is placed upon the clinical psychologist as a practitioner, consultant, teacher, researcher, administrator and role model in the medical setting.

### **CPSY 605 – History and Systems of Psychology**

#### **3 credits**

This course is designed as an overview of the history of psychology in the Western world. The historical approaches to this task will include a historical developmental approach to origins and changes of ideas over time, the study of great persons and schools of thought, and a look at the Zeitgeist of each.

### **CPSY 607 – Cognitive/Affective Bases of Behavior**

#### **3 credits**

This course emphasizes theoretical, conceptual, empirical and clinical issues to better understand the cognitive-affective-behavioral interaction. Areas of concern will include modes of thinking, sensation and visual and other sensory perception, motivation, emotion, concept formation, construction of reality and the self.

### **CPSY 608 – Social Psychology**

#### **3 credits**

This course is designed to help the student understand basic principles and concepts of psychology related to the behavior of individuals in social contexts. Special emphasis is placed upon the social-clinical psychology interface and the role of the clinical psychologist as an applied social psychologist.

### **CPSY 609 – Cross-Cultural Cognitive Behavior Therapy**

#### **3 credits**

This course addresses fundamental awareness and knowledge of cultural competence components. It builds upon knowledge and skills gained in CPSY 623: Human Diversity: Multiculturalism and Individual Differences and further

develops culturally sensitive conceptualization and treatment skills adapting cognitive-behavioral therapy for broadly defined culturally diverse populations.

Prerequisite: CPSY 623

### **CPSY 612 – Cognitive Behavior Therapy for ADHD**

#### **3 credits**

This course examines the current clinical practice and professional literature for ADHD. Topics covered include assessment, comorbid difficulties and disorders, social implications, neuropsychology, and multimodal treatment of this neurocognitive disorder. Controversies regarding multicultural and political issues will also be addressed. Although this course encompasses the assessment and treatment of both children and adults, the emphasis is on cutting edge research into the application of CBT, often in collaboration with pharmacotherapy, for adults with ADHD.

### **CPSY 614 – Advanced Behavior Therapy**

#### **3 credits**

This course is designed to both supplement and continue the material that was covered in CPSY 662: Behavior Therapy. The purpose is to provide students with further experience in the use of advanced behavior therapy techniques (e.g., progressive muscle relaxation, systematic desensitization, covert sensitization and covert positive reinforcement, thought stopping, assertive training) following consideration of the conduct of the behavioral analysis. Didactic material including specific clinical examples and group discussion will be complemented by demonstrations, role-play and video material when possible.

Prerequisites: CPSY 630 and CPSY 662

### **CPSY 616 – Lifespan Development**

#### **3 credits**

This course offers a multifaceted approach to learning about human development. It provides both an empirical and theoretical examination of human development across the lifespan. It is the intention of this course to acquaint the student with essential concepts and models of development. Psychological principles and historical and recent research in the areas of prenatal, cognitive, language, socio-emotional and physical development will be explored and cultural considerations will be incorporated. Overall, this course is aimed at providing a comprehensive, clinically-oriented overview of lifespan development.

[Please note: CPSY 616 and CPSY 620 replace former program requirements CPSY 611 & CPSY 613]

### **CPSY 620 – Psychopathology**

#### **3 credits**

The goal of this course will be to familiarize students with the current diagnostic nosology as well as prominent features associated with psychological disorders.

[Please note: CPSY 616 and CPSY 620 replace former program requirements CPSY 611 and CPSY 613.]

### **CPSY 622 – Ethics in Psychology**

#### **3 credits**

This course familiarizes the student with the APA Code of Ethics, the Pennsylvania Licensing Law for Psychologists and the Specialty Guidelines for the Delivery of Services. It will also discuss the difference between legal and ethical issues and a variety of professional issues.

### **CPSY 623 – Human Diversity: Multiculturalism and Individual Differences**

#### **3 credits**

The intent of this course is to present an overview of issues and methods that will serve as a guide to developing multicultural competence, i.e., the knowledge, skills and attitudes necessary to understand, communicate with and treat a culturally diverse patient population.

### **CPSY 624 – Research I: Research Design and Methodology**

#### **3 credits**

Course objectives are to understand the basic research designs in clinical psychology and the methodological issues in formulating, planning, designing, implementing, analyzing and interpreting the results of research investigations.

Prerequisite: undergraduate or graduate statistics course

### **CPSY 625 – Research II: Psychometrics and Univariate/Multivariate Statistics and Lab**

#### **4 credits**

This course has three major goals. The first goal is to teach doctoral students fundamental and advanced principles and essential concepts in measurement applied to psychological phenomena (commonly referred to as Test Theory or Psychological Measurement). The second major goal is to teach doctoral students fundamental and advanced principles and essential concepts in planning, selecting, conducting, and interpreting statistical analyses of empirical research studies in clinical psychology. The third major goal is to help students develop basic proficiency in the use of SPSS as a tool for analyzing data sets.

Prerequisite: CPSY 624 completed with a grade of B- or better

### **CPSY 626 – Assessment I: Assessment of Cognitive Abilities**

#### **3 credits**

This course identifies the relevant issues/criticisms related to intelligence and intelligence testing. Students will be able to administer, score and interpret the most current edition of the WISC and WAIS, analyze data and organize it in a meaningful way to communicate to the client and prepare complete comprehensive written reports.

## **CPSY 627 – Assessment II: Objective Personality Assessment**

### **3 credits**

This course covers the definition, identification and assessment of a variety of personality functions through the use of objective assessment instruments.

Prerequisite: CPSY 626 completed with a grade of B- or better

## **CPSY 628 – Assessment III: Projective Assessment**

### **3 credits**

This course covers the definition, identification and assessment of a variety of personality functions through the use of projective assessment instruments. Particular emphasis will be placed on the Rorschach and Thematic Apperception Test (TAT).

Prerequisites: CPSY 626 and CPSY 627 completed with a grade of B- or better

## **CPSY 629 – Physiological Bases of Behavior**

### **3 credits**

This course introduces the student to the structures and functions of the brain and central nervous system. In addition, the interrelationship between biochemical, physiological and neurological influences on human behavior will be explored.

## **CPSY 630 – Cognitive Therapy**

### **3 credits**

The two primary goals of this course are to introduce the student to the history, philosophy and conceptual model of cognitive therapy and to address the practice issues revolving around models of treatment, standards of care and the importance of empirically validated treatment.

## **CPSY 632 – Assessment and Treatment of Cluster B Personality Disorders**

### **3 credits**

The focus of this advanced seminar is the exploration of the clinical entities that are coded on the DSM IVTR Axis II, Cluster B including Antisocial, Borderline, Histrionic and Narcissistic Personality Disorders. This course focus will be on the assessment, differential diagnosis, conceptualization, treatment planning, treatment implementation, and the evaluation of treatment outcome related to these disorders. Therapist self-care, resistance, counter-transference and other impediments to the therapeutic alliance and to the therapeutic bond will be emphasized.

## **CPSY 633 – Forensic Psychology**

### **1 credit**

Practicing psychologists are frequently called upon to testify in court. This course focuses on the role of expert witness, and how to be most effective in that role. It provides an overview of the legal system, the law that permits psychologists to testify as experts, and the basics of preparation to work with attorneys and within the court system.

## **CPSY 634 – Pediatric Psychology**

### **3 credits**

This course provides students with an overview of the relationship between children's physical health and their mental health, academic functioning and socio-emotional well-being. A systems approach emphasizes strategies to collaborate with the family, school and health care system. Prevention and wellness promotion programming are discussed. Culturally responsive assessment and intervention strategies to address chronic medical conditions are taught. Legal issues, ethical practice and professional development pertaining to children with health-related issues are also emphasized.

## **CPSY 635 – Test Development**

### **1 credit**

This course is designed to teach students advanced principles, concepts and best practices in designing, developing and evaluating psychological instruments. The course is specifically aimed at providing students with the ability to create and design a psychological inventory of a specific construct in a step by step format. From a measurement theory perspective, students will proceed through the stages of test development including identifying the need for the test; construct identification and clarification; principles of item construction; standardization and administration; designing and scoring item responses; principles of data collection and item analysis; principles of establishing and testing reliability; and methods for establishing and evaluating validity.

## **CPSY 636 – Qualitative Psychology**

### **1 – 3 credits**

The purpose of this course is to promote student knowledge about qualitative methods of research in psychology. Qualitative research generates in depth understanding and rich description of contextual and individual experiences, which can be used to improve practice and generate knowledge about the process and outcomes of school and clinical psychological services. Particular emphasis is placed on the applied use of the grounded theory paradigm.

## **CPSY 638 – Private Practice: How to Build a Viable Practice in Today's Managed Care Environment**

### **1 credit**

This course consists of a comprehensive description of everything practitioners need to know if they plan to start a private clinical practice, including marketing, developing referral sources, advertising, brochure designing, picking the best location, providing office amenities, selecting phone systems and billing software and hiring of staff. The history of mental health managed care will be discussed and students will gain knowledge of various insurance vehicles. The advantages of insurance-free practice, general versus specialty practice, sole proprietor versus partnerships or corporations, and child focused services versus adult and geriatric services will be presented. All issues concerning fees, such as setting fees, collections, dealing with no-shows and responding to late cancellations will be described. Malpractice insurance, risk management, and quality management



will be discussed in depth, as will the advantages of being a cognitive-behavioral therapist in the private sector. Ethical issues related to the development of a private practice will also be addressed.

### **CPSY 639 – Sleep Disorders**

#### **3 credits**

The content of this course follows a progression from basic sleep issues, circadian rhythms and sleep function to methods of evaluating sleep disorders. Common sleep disorders and their treatment will be presented along with sleep issues unique to children and the elderly. Sleep disturbances associated with mood, anxiety and other psychological disorders will also be presented.

### **CPSY 640 – Anxiety Disorders**

#### **3 credits**

Anxiety spectrum disorders including generalized anxiety, phobia, panic disorder and obsessive/compulsive states will be studied from a conceptual and treatment perspective. Common behavioral, cognitive, medical and affective issues of anxiety will be discussed through a variety of modalities.

Prerequisites: CPSY 603, CPSY 607, and CPSY 630

### **CPSY 641 – Affective Disorders**

#### **3 credits**

Major depression and bipolar disorders will be the focus of this course. Common behavioral, cognitive and medical issues of affective disorders will be discussed through a variety of modalities.

Prerequisites: CPSY 603, CPSY 607, CPSY 614 and CPSY 630

### **CPSY 642 – Personality Disorders**

#### **3 credits**

Common behavioral, cognitive, medical and affective issues in dealing with the patient with personality disorder will be examined. A variety of assessment instruments, including the MMPI I and II, Rorschach, Thematic Apperception Test and Million Scales, will be used.

Prerequisites: CPSY 603, CPSY 607 and CPSY 630

### **CPSY 643 – Therapy with Couples**

#### **3 credits**

This course focuses on the treatment of dyadic relationships. Various theoretical and technical models of couple-based therapy will be discussed and demonstrated.

Prerequisites: CPSY 602, CPSY 603, and CPSY 630

### **CPSY 645 – Family Therapy**

#### **3 credits**

This course focuses on the treatment of families. Various theoretical and technical models of family-based therapy will be discussed and demonstrated.

Prerequisites: CPSY 603 and CPSY 630

### **CPSY 646 – Child/Adolescent Therapy**

#### **3 credits**

The treatment of children and adolescents with school, home, social or intrapersonal difficulties are covered. Various treatment modalities including outpatient, family, inpatient and residential options will be discussed.

Prerequisites: CPSY 603 and CPSY 630

### **CPSY 647 – Substance Abuse**

#### **3 credits**

The abuse of various substances including alcohol, narcotics, caffeine, nicotine, prescription drugs and amphetamines will be discussed. Common behavioral, cognitive, medical and affective issues in dealing with the substance-abusing patient will be discussed.

Prerequisites: CPSY 603, CPSY 607, and CPSY 630

### **CPSY 648 – Neuropsychological Assessment**

#### **3 credits**

Neurochemistry, neuropsychology, neurophysiology and neuropathology will be covered. Diagnostic and treatment issues of patients with various neurological disorders will be discussed from the medical and psychological perspectives.

Prerequisites: CPSY 607, CPSY 626, CPSY 627 and CPSY 628

### **CPSY 649 – Biofeedback I**

#### **3 credits**

Psychophysiological fact and theory will serve as the basis for training in the specialized therapeutic situation created when individuals are placed in a feedback loop with their own physiological processes.

Prerequisites: CPSY 603, CPSY 607, and CPSY 630

### **CPSY 650 – Pharmacology**

#### **3 credits**

The psychologist working with the physician must be knowledgeable about the main effects, side effects and synergistic effects of both psychopharmacologically specific and other medically prescribed drugs. This course introduces the student to the rationale and choices of drugs used in medical practice.

Prerequisite: CPSY 607

## **CPSY 651 – Pain Management**

### **1 - 3 credits**

The purpose of this course is to provide an overview of the assessment and treatment of acute and chronic pain. Topics include but are not limited to: historical foundations, the biopsychosocial model, psychological factors, assessment and treatment strategies including cognitive-behavioral approaches, special populations and future directions.

Prerequisites: CPSY 603, CPSY 607 and CPSY 630

## **CPSY 652 – Practicum I**

### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing the basics of evaluation, psychological assessment, psychotherapy and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Course material includes teaching, modeling and practice with a work sample demonstrating a manually informed, empirically supported approach to treatment; role-play and demonstration of motivational interviewing; role-play and demonstration in using the SCID; review and self-evaluation of STEPPS tapes; practice using Person's model of case formulation; and practice using cognitive-behavioral assessments and treatment plans. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

## **CPSY 653 – Practicum II**

### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing the basics of evaluation, psychological assessment, psychotherapy and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Course material includes teaching, modeling and practice with work samples demonstrating skills for forming a working alliance with clients with a variety of individual and culturally diverse characteristics; demonstrating a functional analytic model formulating case conceptualizations; recognizing and addressing biases, preconceptions and assumptions from a cognitive-behavioral perspective; administering, scoring and interpreting cognitive, behavioral and personality assessment measures, and providing feedback to clients and referring professionals; adopting a hypothesis-testing approach to clinical decision-making; understanding important diversity, ethical, legal and professional dilemmas in the practice of clinical psychology; and applying the Psychotherapy Skills Inventory as a form of self-evaluation and peer consultation of psychotherapy skill. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

### **CPSY 654 – Practicum III**

#### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing the basics of evaluation, psychological assessment, psychotherapy and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Course material builds upon skills learned in Practicum I and II, and includes teaching, modeling and practice with work samples demonstrating competency in interpreting and writing up a comprehensive psychological assessment; reviewing and evaluating a faculty STEPPS tape; and developing a case formulation using Nezu and Nezu's Problem Solving Model. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

### **CPSY 655 – Practicum IV**

#### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing the basics of evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Course material builds upon skills learned in Practicum I, II and III, and includes modeling and practice with work samples demonstrating consultee-centered consultation; intermediate-level competency in selected cognitive therapy techniques; review and evaluation of a faculty consultation videotape; use of peer consultation; professional development and introduction to the APPIC Application for Psychology Internship; and management skills, by reviewing the utilization review and quality assurance policies at their practicum site and conducting a group interview in class of an expert from a major leading managed care/behavioral health provider around important issues related to utilization review and quality assurance. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

### **CPSY 656 – Geropsychology**

#### **3 credits**

The focus of this course is to examine in depth the process and concomitants of aging. The biopsychosocial, medical, physiological, behavioral and cognitive components are explored.

Prerequisites: CPSY 607

### **CPSY 657 – Group Therapy**

#### **3 credits**

Group psychotherapy will examine the unique strengths and “curative” factors associated with this modality. Boundaries, group composition and other critical

aspects of group dynamics will be examined. Various group models including cognitive-behavioral, problem solving and other behavioral approaches, interpersonal and developmental models will be reviewed.

Prerequisites: CPSY 603 and CPSY 630

### **CPSY 658 – Treatment of Complex and Difficult Patients**

#### **3 credits**

This course is an elective that is designed to introduce students to the patient who requires more time and energy and may have difficulty making progress in treatment. Through the use of videotapes, role-playing, experiential techniques, didactic presentations, class discussion, case presentations and readings, this course will focus on the difficult patient.

### **CPSY 659 – Biofeedback II**

#### **3 credits**

Psychophysiological fact and theory will serve as the basis for training in the specialized therapeutic situation created when individuals are placed in a feedback loop with their own physiological processes.

### **CPSY 660 – Practicum Elective**

#### **1-2 credits**

This practicum is designed for doctoral students interested in obtaining additional practicum experience and includes a 2.5-hour weekly seminar at PCOM and 8 hours/week at a practicum site doing evaluation, psychological assessment, psychotherapy and other work appropriate to the role of a psychologist. Supervision by PCOM faculty or designated supervisors is provided. Each credit represents 84 hours of work.

### **CPSY 661 – Administration, Consultation and Supervision of Behavioral Health Care**

#### **3 credits**

This course is designed to provide students with the skills for conducting clinical supervision, mental health consultation, and the management of mental health services associated with a variety of administrative and clinical supervisory positions.

Prerequisites: CPSY 652 and CPSY 653

### **CPSY 662 – Behavior Therapy**

#### **3 credits**

This course is designed to introduce students to the philosophy and practice of behavior therapy. A major goal of this course is to help students effectively utilize basic behavioral techniques. Emphasis will be placed on understanding how learning principles inform the application of these techniques and the importance of implementing these techniques within the context of a carefully considered behavioral case conceptualization. Students will gain experience in

functional behavioral assessment and numerous behavioral intervention strategies (e.g., contingency management, relaxation training, systematic desensitization, exposure, response prevention).

Prerequisite: CPSY 601 with a grade of B- or better

### **CPSY 663 – Behavioral Assessment**

#### **3 credits**

The course covers the fundamentals of behavioral assessment and distinguishes them from traditional assessment. Psychometric issues addressed include reliability, validity and reactivity of assessment. Methods of assessment include behavioral interviewing, behavioral observation, self-monitoring, cognitive assessment, psychophysiological assessment and others. Finally, behavioral assessment for a few clinical problems is also discussed.

Prerequisites: CPSY 603, CPSY 626, CPSY 627, CPSY 628 and CPSY 630

### **CPSY 664 – Psychology of Eating Disorders**

#### **3 credits**

This course provides an overview of current theory, research and practice regarding the treatment of anorexia nervosa, bulimia nervosa and other variants of disordered eating. Clinicians will learn evaluation and treatment planning procedures, with attention to developing the therapeutic relationship and to professional collaboration.

Prerequisites: CPSY 603, CPSY 607, and CPSY 630

### **CPSY 665 – Educational Assessment**

#### **1 - 3 credits**

This course is an elective that is designed to introduce graduate students in clinical psychology to the field of individualized educational assessment practices and their links to educational interventions. The course will be presented from the general perspective of developmental cognitive neuropsychology and the application of process-oriented assessment techniques.

### **CPSY 667 – Internship**

#### **1 credit**

PsyD students must register for each academic term in which the internship is served.

### **CPSY 670 – Problem-Solving Therapy for Medical Patients**

#### **3 credits**

This course is designed to provide an indepth survey of problem-solving therapy and its applications. The course focuses on training students to conduct this empirically-supported, manually-driven approach, and also teaches students to adopt a problem-solving approach to clinical decision-making. Emphasis is on problem-solving therapy for persons with medical conditions such as cancer,

irritable bowel syndrome and multiple sclerosis; discussion and examples of problem-solving therapy's application to treatment of anxiety and depression are also highlighted.

**CPSY 671 – Program Planning and Evaluation of Mental Health Services**  
**3 credits**

The course provides students with the theoretical foundations and methods used in planning and evaluating programs to prevent and/or service DSM-IV-TR mental disorders. Specific attention will be given to methods and models for: 1) assessing mental health needs in the community; 2) planning and designing mental health-related prevention and service programs; and 3) evaluating the effects of community-based programs to prevent and/or service DSM-IV-TR mental disorders.

**CPSY 672 – Cognitive Behavioral Assessment and Treatment of Children and Families Part I: Treatment of Enuresis, Encopresis, Stealing, Fire Setting and Other Disorders of Childhood**  
**1 credit**

This course reviews fifteen cognitive-behavioral techniques as they relate to the treatment of children. Students learn to develop treatment protocols that include practical clinical strategies for the treatment of enuresis, encopresis, stealing, and fire setting. Myths and facts about causes and treatment of enuresis are discussed, as are outcome studies and medication issues. Procedures for dealing with common parenting issues such as sibling rivalry, teasing, and whining are also described.

**CPSY 674 – Research III: Dissertation Development Seminar**  
**3 credits**

This course teaches students the step-by-step processes involved in the dissertation process from beginning to end. Students develop a research question, secure a dissertation chair, and compile an extensive bibliography related to their doctoral dissertation research project.

Prerequisite: CPSY 624 and CPSY 625 completed with a grade of B- or better; successful completion of Essay and Objective Comprehensive Exams

**CPSY 674A – Research IV: Methodology Development and Statistical Planning**  
**3 credits**

Students develop an extensive, detailed outline of their literature review. Following this, students develop the methodology and statistical and analytic plan for completing their dissertation research project. Issues such as selection of an appropriate design model, subject recruitment and assignment, and selection of proper data analytic models are covered. Finally, students begin the process of completing the literature review based on their outline and bibliography.

## **CPSY 674B – Research V: Manuscript Development and Defense Planning; Dissertation Advisement**

### **3 credits**

During this course, students complete their dissertation proposals, secure all three members of their dissertation committee, and schedule. Finally, they conduct the defense of their dissertation proposals which includes an oral presentation of their research project in a PowerPoint presentation.

## **CPSY 675 – Dissertation Advisement**

### **1 credit**

After students have completed Research V, they continue to work on the completion of their doctoral thesis and meet with Dissertation Committee members and work on their own to complete all the steps through final approval. Students register for this course each and every term in which they are enrolled until they have successfully defended their final dissertation thesis.

## **CPSY 676 – Psychology of Gender**

### **3 credits**

This course addresses the differences and similarities between women and men and how they relate to one another. To what extent are gender differences due to biology, to what extent to environment and to what extent the interaction of the two, as a function of time and place?

Prerequisite: CPSY 608

## **CPSY 677 – Harm Reduction**

### **3 credits**

Harm reduction is an evidence-based approach to understanding and working with substance users and persons who are dually diagnosed in both clinical and community settings. This course presents an overview of harm reduction from a variety of perspectives including government policies and how they affect treatment, societal perspectives, bioethics and clinical work with substance users and dually diagnosed persons. A variety of guest lecturers present harm reduction as it is implemented in the real world. Participants also explore their own values and beliefs about psychoactive substances and the people who use them.

## **CPSY 678 – Assessment and Treatment of Addictive Behavior**

### **3 credits**

This course provides an overview of the epidemiology, etiology, and assessment and treatment of addictive behaviors including substance abuse, gambling and excessive sexual behavior. The focus is on research-based understanding of addictive behaviors and on current theoretical and technical knowledge and controversy in the field.

## **CPSY 679 – Child Therapy**

### **3 credits**

Psychotherapy with children requires a unique set of skills and understanding of



the therapeutic process. This course focuses on the theoretical underpinnings of common therapeutic techniques used in psychotherapy with youth. Interpersonal, emotional and cognitive therapeutic change mechanisms are addressed. Basic techniques in assessment, play therapy, family therapy and cognitive behavioral therapy are reviewed. In addition, this course examines intervention programs for common psychiatric disorders while emphasizing an individualized approach to treatment. Participants will develop an appreciation for the complex nature of childhood disorders and the diversity of circumstances in which they occur. As children's behaviors occur within a multicultural context, emphasis will be placed on establishing interventions that are developmentally sensitive, culturally diverse, and ethically sound when working with children and adolescents. This course is designed to present an overview of issues and methods that will help provide participants with the awareness, skill, and sensitivity necessary to understand, communicate with and effectively treat children and their families.

**CPSY 680 – Comprehensive Exam Review**  
**(not for credit)**

Students preparing for the comprehensive exams during terms in which no other courses are taken may register for exam review for assistance and access to campus resources.

**CPSY 681 – Essay Comprehensive Exam**  
**(not for credit)**

Students register for this portion of the comprehensive exam during the first term in which the exam is offered upon student's eligibility.

**CPSY 682 – Objective Comprehensive Exam**  
**(not for credit)**

Students register for this portion of the comprehensive exam during the first term in which the exam is offered upon student's eligibility.

**CPSY 684 – Grief, Loss, and Bereavement**  
**1 credit**

This course focuses on working with persons who are facing end-of-life issues for themselves or loved ones, or who are experiencing a loss, more broadly defined. Theoretical models for understanding grief and their applications will be discussed. Ethical and legal considerations and the role of the psychologist in end-of-life care will be introduced. Therapeutic approaches to working with persons experiencing loss or grief will be explained. Great emphasis will be placed on preparing students to work with those in grief and bereavement through introspection, self-reflection, and exposure to the types of persons and situations that may present with grief and loss as the primary presenting concern.

**CPSY 685 – Cross-Cultural Assessment**  
**3 credits**

The goal of this course is to identify the principles, theories, issues and practices

that help to inform the assessment of individuals from diverse cultures. Students will explore the multicultural methods of assessment needed when using “standard” objective and projective methods and techniques.

### **CPSY 686 – Cognitive Behavioral Treatment of Crisis**

#### **3 credits**

The strategies and techniques for intervening in crisis situations are the focus of this course. The goal is to provide a theoretical and conceptual basis as well as a rationale for a cognitive behavioral format for the delivery of crisis intervention services.

### **CPSY 690E – Rehabilitation Psychology**

#### **1 - 3 credits**

This course introduces students to the concepts and techniques of working in rehabilitation settings. The core components of physical and cognitive rehabilitation are introduced. Special populations including stroke/TBI, amputees, chronic pain patients, cardiac and low vision will be covered. The course will describe the elements of the psychologist’s role within the framework of an interdisciplinary team. Moreover, issues of working in various settings, including acute hospitals, rehabilitation hospitals, out-patient rehabilitation settings, and vision centers will be addressed. Students will be exposed to a thorough review of the practice of cognitive rehabilitation applied to patients with cognitive disorders.

### **CPSY 691E – Cognitive Behavioral Assessment and Treatment of Children and Families Part II: Treatment of School Phobia and Other Common Phobias of Childhood**

#### **1 credit**

This course describes the causes and prevention of childhood phobia. Seventeen etiological factors linked to school phobia will be identified, as will fourteen effective treatment strategies. Students will learn to develop treatment protocols which will include practical clinical techniques for the treatment of night terrors, fear of water, small animals, thunder, insects, sleeping alone, and the after effects of molestation. Strategies for the treatment of obsessive compulsive disorders and eating disorders will also be discussed.

Note: CPSY 672 is not a prerequisite for this course.

### **CPSY 692E – Crisis Mental Health and Disaster Response**

#### **3 credits**

This course explores key components of disaster mental health, including how disaster mental health services differ from traditional psychotherapy; the design of mental health programs needed in disaster; and how mental health systems are delivered in a disaster. This course presents an overview of issues and methods that will help provide students with the awareness, skill, and sensitivity necessary to understand how to intervene effectively with special populations and at-risk groups in a disaster, including children, older adults, people with disabilities,

ethnic, and cultural groups indigenous to the area, and/or people living in poverty with few resources.

### **CPSY 694E – Crisis Intervention**

#### **1 credit**

This course provides an overview of crisis theory, strategy, and intervention, targeting specific and frequently encountered crisis situations faced by practicing psychologists in all levels of care. The course will review evidenced-based practices, and best practices specific to those crisis scenarios, and discuss psychologist requirements and necessary skill sets. In addition, specific cognitive-behavioral interventions for specific crises scenarios will be presented, in concert with discussion on functioning as a member of a multidisciplinary team.

### **CPSY 697E – Special Topics: Cognitive Behavior Therapy for Post-traumatic Symptomatology**

#### **1 credit**

This course is designed as a special topics course as the focus will be on specific groups when offered. It is an introduction to the cognitive-behavioral treatment of PTSD. A background on PTSD-specific treatment issues will be given as well as a brief review of the empirically supported treatments and treatment elements. The remainder of the course will consist of an introductory training in the methods of Prolonged Exposure therapy for PTSD.

### **CPSY 703 – Clinical Research Practicum**

#### **1 credit**

The Clinical Research Practicum is designed to instruct students in the process of research development, data collection, data management and analysis, and data reporting of applied clinical research designed and led by core faculty. Students will often have opportunity and responsibility for direct client/patient contact, learning about empirically-supported treatments or development of empirical testing of treatments, grant submission, and administering and scoring clinical measures that can be used for research and practice. Student participation and advisement/instruction may be individual or in groups.

### **CPSY 704 – Assessment and Treatment of Angry Patients**

#### **3 credits**

This course provides an overview of the history of emotions and the normal expression of anger, as well as its psychopathology. The theories and paradigms that have been used to study anger are explored. Anger, as it presents in various populations and the special considerations this requires, is also explored.

### **CPSY 705 – Personality Disorders in Children and Adolescents**

#### **3 credits**

Are children who manifest certain traits displaying what may be precursors to later personality disorders, or can they be diagnosed as having a personality disorder during childhood or adolescence? Clinicians have responded in a

number of ways, ranging from the affirmative to the negative with a host of ethical, “legal,” and conceptual issues evoked for support. This course investigates that question and presents arguments for and against the diagnosing of children and adolescents as having a personality disorder. The issue is viewed through the lens of the cognitive behavioral model and examines what techniques would be useful for children and adolescents.

### **CPSY 710 – Practicum V**

#### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing the basics of evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Course material builds upon skills learned in Practicum I, II, III, and IV, and includes teaching, modeling and practice demonstrating patient-centered case consultation; beginning supervision skills; intermediate to advanced proficiency in interpreting and writing up of a psychological assessment or test battery; and developing a comprehensive, behavioral assessment and treatment plan derived from Needleman’s model of case formulation. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

### **CPSY 711 – Practicum VI**

#### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing more advanced evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Building upon Practicum I through V students develop teaching skills by 1) conducting an in-service education presentation at the practicum site to demonstrate an empirically-based approach to intervention, and 2) reading and grading a scholarly paper submitted by a non-matriculated student attending a workshop in cognitive behavioral therapy with a senior faculty member. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

### **CPSY 712 – Practicum VII**

#### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing more advanced evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Course material builds upon skills learned in Practicum I through VI, and culminates in a Capstone requirement of a

comprehensive case study that includes video/audio of therapy session, assessment battery and report on same patient, a case-conceptualization and treatment plan, a tape of a supervision session, and a PowerPoint of an in-service training session led by the student. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

### **CPSY 713 – Practicum VIII**

#### **1.5 credits**

Minimum of 8 hours/week at practicum site (12 or more hours a week are expected by most practicum sites) and a weekly seminar at PCOM performing more advanced evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a beginning psychologist. Supervision by PCOM faculty or designated supervisors is provided. Additional elective practicum hours are an option. Additional Capstone requirements include demonstration of: an assessment consultation work sample; supervision of a master's level student in psychology; advanced case conceptualization skills; advanced cognitive-behavioral assessment and treatment planning; and teaching and administration skills in academics and health care organizations. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues.

## Post-Doctoral Certificates – Clinical Health Psychology and Clinical Neuropsychology

### **CPSY 802 – Clinical Foundations of Neuropsychology**

#### **3 credits**

This course introduces the current state of the field and well-recognized and commonly used approaches in the clinical understanding of human brain-behavior relationships.

### **CPSY 803 – Advanced Ethics, Health Policy, and Multicultural Competency in Medical Settings**

#### **3 credits**

This course focuses on the application of the APA Code of Ethics, the Pennsylvania Licensing Law for Psychologists and the Specialty Guidelines for the Delivery of Services to delivery in multidisciplinary health care settings and in care of medical patients. The difference between legal and ethical issues and a variety of professional issues will be addressed. Emphasis will be placed on ethical decision making often encountered in working with clinical health and neuropsychology/rehabilitation populations.

### **CPSY 804 – Traumatic and Degenerative Brain Disorders**

#### **3 credits**

This course offers a survey of clinical research as it relates to behavioral recovery following damage in the central nervous system. Recent theories and literature are stressed. Case studies and direct application to clinical work will be emphasized.

### **CPSY 805 – Cognitive Habilitation and Rehabilitation**

#### **3 credits**

This course develops advanced clinical psychology skills specific to work within rehabilitation settings. The core components of physical and cognitive rehabilitation are built upon. Issues of working within an interdisciplinary team and in various settings, including acute hospitals, rehabilitation hospitals, outpatient rehabilitation settings, and vision centers will be addressed. Students will be exposed to a thorough review of the practice of cognitive rehabilitation applied to patients with cognitive disorders. Case studies, clinical treatment planning, and direct application to clinical work will be emphasized.

### **CPSY 820 – Behavioral and Health Psychology Assessment**

#### **3 credits**

This advanced course familiarizes students with diagnostic techniques and clinical assessment tools and skills necessary for practice in various medical, surgical, and multidisciplinary health care settings. Measures used for clinical practice and research investigations will be covered. Students will be guided to adopt appropriate clinical decision-making skills for selection of assessment approaches, and will gain practice in the use of appropriate instruments in these

settings. Students are required to have had clinical psychology assessment courses prior to enrolling in this course.

### **CPSY 850 – Clinical Placement - Clinical Health Psychology**

#### **1 credit**

Minimum of 10-16 hours/week at a clinical site and a weekly seminar at PCOM performing more advanced evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a clinical health psychologist. Supervision by PCOM faculty or designated supervisors is provided. Course material builds upon certificate courses and culminates in a professional evaluation via standardized patient programs.

### **CPSY 860 – Clinical Placement - Clinical Neuropsychology**

#### **1 credit**

Minimum of 10-16 hours/week at a clinical site and a weekly seminar at PCOM performing more advanced evaluation, psychological assessment, psychotherapy skills, and other work appropriate to the role of a clinical neuropsychologist. Supervision by PCOM faculty or designated supervisors is provided. Course material builds upon certificate courses and culminates in a professional evaluation via standardized patient programs.

## ACADEMIC DEPARTMENTS AND FACULTY

### ***THE FACULTY OF PCOM - Teaching in Philadelphia***

A highly qualified faculty of physicians, psychologists, physician assistants, educators, scientists and support staff implement the educational goals of the College. Faculty members are dedicated to the singular purpose of educating students for the skilled and caring practice of osteopathic medicine and the health professions. The academic programs are served by many faculty across the country who provide clinical instruction at various affiliated sites as volunteer faculty. In a real sense, education at PCOM is carried out by this larger PCOM family. Faculty concentration and dedication show in the teaching students receive. Faculty appointments are listed under the College departments in which they serve.

#### **Anatomy**

##### ***Professor and Chair***

Tage N. Kvist, PhD

##### ***Professors***

Patrick Coughlin, PhD

Camille DiLullo, PhD

Tage N. Kvist, PhD

##### ***Professors Emeriti***

Vincent T. Cipolla, DO

Robert J. Niewenhuis, PhD

##### ***Associate Professors***

Christopher S. Adams, PhD

Marina DeAngelo, PhD

Michael P. McGuinness, PhD

Michael Shank, DO

##### ***Instructor***

David M. Cavanaugh, BS

### **Biochemistry and Molecular Biology**

##### ***Professor and Chair***

Ruth D. Thornton, PhD

##### ***Professors***

Ruth Carter Borghaei, PhD

Farzaneh Daghigh, PhD

Eugene Mochan, PhD, DO

Ruth D. Thornton, PhD



Assistant Professors  
Theodore J. Passon, PhD  
Dianzheng Zhang, PhD

***Adjunct Faculty***

Kevan S. Green, DMD

***Emergency Medicine***

***Professor and Chair***

John W. Becher, DO

***Professor***

John W. Becher, DO

***Clinical Professor***

Bohdan Minczak, PhD, MD

***Associate Professor***

Steven J. Parrillo, DO

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Gavin C. Barr Jr., MD

William F. Bond, MD

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Thomas A. Brabson, DO

James J. Flowers, DO

Dennis M. Guest, DO

Michael J. Hoh, DO

John J. Kelly, DO

Ronald A. Lutz Sr., MD

Richard S. MacKenzie, DO

Rosa M. Marino, DO

Douglas L. McGee, DO

Brian A. Nester, DO, MS

Steven J. Parrillo, DO

John C. Prestosh, DO

Stephen A. Pulley, DO

Alex M. Rosenau, DO

Kevin R. Weaver, DO

Michael S. Weinstock, MD

***Assistant Professor***

Barry Burton, DO

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Eric C. Appelbaum, MD  
Paul H. Beyer, DO  
William J. Brunelli, MD  
Eric C. Bruno, MD  
David B. Burmeister, DO  
Gerald A. Coleman III, DO  
Steven M. Conroy, DO  
Matthew D. Cook, DO  
Jerome C. Deutsch, DO  
Jean E. Dorce, DO  
Arthur J. Dortort, DO  
Elizabeth M. Evans, DO  
Joseph J. Fassel, MD  
Stephen P. Fooskas, MD  
Steven P. Frei, MD  
Christine F. Giesa, DO  
Michael D. Gindi, MD  
Stephanie L. Goren-Garcia, DO  
Marna R. Greenberg, DO  
Mark A. Guzzo, MD  
Gregg E. Hellwig, MD  
Susan Hinchcliffe, DO  
Russell E. James II, MD  
Bryan G. Kane, MD  
Kathleen E. Kane, MD  
Vivian B. Kane, MD  
Susan L. Krieg, MD  
John F. McCarthy, DO  
James G. McHugh, MD  
Anthony Mangiaracina, DO  
Thomas Marchiondo, DO  
Jeffrey M. Moldovan, DO  
Anthony V. Mosca, DO  
Michael Nguyen, MD  
Joseph M. Novi, DO  
Daniel E. Oberdick Sr., DO  
Andrew J. Panko, DO  
Mark A. Persin, DO  
Constantina Pippis-Nester, DO  
Thomas F. Powell, DO  
Narasinga P. Rao, DO  
John F. Reilly, DO  
David Richardson, MD  
Kevin R. Roth, DO  
Diane M. Saldukas-Mazur, MD

Joseph D. Sexton, MD  
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Gregory J. Smolin, DO  
Rick Sumrock, MD  
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Hal Tucker, DO  
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John F. Wheary, DO  
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Brian Wolfson, MD  
Charles C. Worrilow, DO  
William E. Zajdel, DO  
Jennifer J. Zambo, DO  
Anthony J. Zinobile, MD

***Clinical Instructors***

Jae K. Ahn, DO  
Michael Allswede, DO  
Janice K. Balas, MD  
Emily Barbee, MD  
Jennifer J. Brown, PA-C  
Kevin Casey, DO  
Nicole Ceccacci, DO  
Joseph Clark, DO  
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Stuart Friedman, DO  
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Sharon Jacob, MD  
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Jaime Roques, MD  
Amit Sareen, MD  
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Tara Sheets, MD  
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Nathan Welle, PA-C  
Scott Winot, MD  
Tiruwork Wondemhunegne, DO, MD  
Matthew Young, DO

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#### ***Divisional Professor and Chair***

Oliver C. Bullock, DO, Community Medicine

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Kenneth J. Veit, DO, MBA

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Larry M. Finkelstein, DO  
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David M. Callahan, DO  
Gordon R. Eck, DO  
Nelson Eng, DO  
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A. Scott McNeal, DO  
Frank P. Matrone, DO  
Katherine A. Navone, DO  
Leonard Popowich, DO  
Lawrence L. Silberberg, DO  
David G. Thimons, DO

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Marta Motel, DO  
Harold Schreiber, DO  
Barbara T. Williams-Page, DO  
David Wood, DO

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Onyeama Anakwe, DO, PhD  
Ronald Baird, DO  
Frank J. Baniewicz Jr., MD  
Hal Bendit, DO  
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Joseph Bognet, DO  
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James Clarke, DO  
Mark Cohen, DO  
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Dominick Commodaro, DO  
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D. Daniel Files, DO  
Gerardo J. Franco, DO  
Richard Frey, DO  
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Jon Lepley, DO

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Anthony Lobianco, DO  
Vincent Lobo, DO  
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E. Kathleen Sweeney, DO  
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James Tweedy, DO  
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Michael J. Zawisza, DO

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Carol Bowes-Lawler, DO  
Julia Helstrom, DO  
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Chris Bellerieri, DO  
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Murray Brand, DO  
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Gary Czulada, DO  
David J. Davis, DO  
Eileen DiGregorio, DO  
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Jill Kane, DO  
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Kieren P. Knapp, DO  
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Paul Kosmorsky, DO  
Jeffrey Langbein, DO  
Jonathan B. Levyn, DO  
Lori Lewis, DO  
Aaron Listopad, DO  
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Tricia Petrucelli, DO  
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Michael W. Semelka, DO

Woun Seok, DO  
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Richard Stigliano, DO  
Curtis Swagler, DO  
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Frank Thomas, DO  
Steven Thomas, DO  
Michelle Thompson, DO  
Jason Torrente, DO  
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Lori Truman, DO  
Jean Wilson, DO  
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### **Geriatric Medicine**

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Katherine E. Galluzzi, DO

#### ***Professor***

Katherine E. Galluzzi, DO

#### ***Associate Professor***

Michael Shank, DO

#### ***Clinical Associate Professor***

M. Susan Burke, MD

#### ***Assistant Professor***

Nicol E. Joseph, DO

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Gregory Busch, DO

Umar Farooq, MD

Debbie Fox, DO

## **Internal Medicine**

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Bruce Kornberg, DO, Cardiology

Pat A. Lannutti, DO, Preventive and General Medicine

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Joseph S. Lubeck, DO, Neurology

William A. Nickey, DO, Nephrology Co-Chair

Stephen M. Purcell, DO, Dermatology

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Issam Cheikh, MD

Leif E. Christiansen, DO

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Kelly D. Heiland, DO

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Julia Kennedy, DO

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Steven Lichtenstein, DO  
George Lieb, MD  
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Gerald Pytlewski, DO  
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Mansur Shomali, MD  
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Erik I. Soiferman, DO  
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David M. Stein, DO  
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Jonathan Warren, MD  
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Brian L. Penza, DO

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Haitham Abughnia, MD

Kirmanj Ahmed, MD  
Mohammad Alauddin, MD  
Ibrahim M. Almeky, MD  
Khalid Al-Talib, MD  
Christopher Alia, MD  
Evan Alley, MD  
Richard L. Alweis, MD  
Bharti Asnani, MD  
Muhammad Athar, MD  
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Michelle Bahrain, DO  
Virginia Banks, MD  
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Stanley Berger, MD  
Gioia Berna, MD  
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Jill Blickley, DO  
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Maytee Boonyapredeee, MD  
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Jocelyn Camara, MD  
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David Chernicoff, DO  
Raynard Cheung, MD  
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Anthony Clay, DO  
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Harry Glass, DO  
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Richard B. Kanoff, DO  
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Arthur J. Sesso, DO

### ***Clinical Professors***

Mark L. Stabile, DO  
Maxwell Stepanuk Jr., DO

### ***Clinical Associate Professors***

Andrew J. Gelman, DO  
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William R. Henwood, DO  
Robert R. Kaneda, DO  
William L. Kliefoth, DO  
Glenn A. Kline, DO  
Benjamin Lam, DO  
Lawrence S. Levit, MD  
Lynne B. McGrath, MD  
A. Lee Osterman, MD  
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David Ringel, DO  
Scott E. Rosenthal, DO  
Ira C. Sachs, DO  
Robert J. Skalicky, DO  
Patti A. Stefanick, DO  
Francis P. Sutter, DO

### ***Assistant Professor***

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Jerome Bonier, DO  
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Ronald L. Buckley, DO  
Joseph Cardinale, DO  
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Michael S. Champney, MD  
Darrel Datko, DO  
Howard C. Doughty, DO  
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Patrick Elliott, DO  
Scott M. Fried, DO  
Reynaldo T. Gannon, MDM  
Richard C. Harkaway, MD  
Kenneth C. Heist, DO  
Mark P. Holencik, DO  
Kern M. Hughes Jr., DO  
Charles Huston, MD  
Matthew C. Indeck, MD  
Peter J. Isaac, DO  
Robert H. Jama, DO  
Kurt Jute, DO  
Mark R. Katlic, MD  
Jack Kazanjian, DO  
Jeffrey Keyser, DO  
Steve H. Kim, MD  
Donald A. Koenigsberg, DO  
Patrick J. Lenahen, MD  
Marian P. McDonald, DO  
Robert D. McGarrigle, DO  
Dennis McHugh, DO  
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John J. Nevulis, MD  
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Jan A. Olenginski, DO  
Bradley S. Parlin, DO  
Michael D. Pasquale, DO  
Walter C. Peppelman Jr., DO  
Thomas J. Renz, DO  
Peter F. Rovito, DO  
Kamalesh Shah, MD  
David J. Simons, DO  
Joseph J. Stella, DO

Thomas C. Sullivan, MD  
James J. Tayoun, DO  
Garry J. Thomas, MD  
Edward Uberti, DO  
Raymond L. Weiland, DO  
William P. West, DO  
Richard J. Westcott, MD  
Christopher J. You, MD

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Chris Allen, MD  
Edward Armbruster, DO  
John A. Avallone, DO  
Kalind Bakshi, MD  
Alfred Bogucki, MD  
Jeff Brodsky, MD  
Gregory Brusko, DO  
Stephen S. Cairone, DO  
William Carney, MD  
Richard Chang, MD  
Milton Coll, MD  
Scott A. Currie, DO  
Joanna M. DeLeo, DO  
Raj Devineni, MD  
Bruce Duke, MD  
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Beth Dupree, MD  
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Martin J. Fleishman, MD  
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Gerard Garguilo, MD  
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Fredric Goldberg, MD  
Robert Golub, MD  
James Gregory, MD  
Brett E. Groff, DO  
Vinay Gupta, MD  
Drew Hecht, DO  
Richard F. Heitmiller, MD  
Jon R. Henwood, DO  
Nathaniel Hill, DO  
Vinod Lakhanpal, MD  
Matthew W. Lawrence, DO

Brad Lerner, MD  
Mark LiBassi, MD  
Benjamin Lowentritt, MD  
Philip McElroy, MD  
Anthony Mannarino, MD  
Marshall Miles, DO  
Chittur Mohan, MD  
L. Jarrott Moore, MD  
Timothy O'Donnell, MD  
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Jennifer Simmons, MD  
Robert J. Skalisky, DO  
Stephen Soll, MD  
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A highly-qualified faculty of physicians, pharmacists, educators, scientists and support staff implement the educational goals of the College. Faculty members are dedicated to the singular purpose of educating students for the skilled and caring practice of osteopathic medicine, pharmacy and the health professions. In a real sense, education at GA-PCOM is carried out by this larger GA-PCOM family. Faculty concentration and dedication show in the teaching students receive.

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Vlad Stanescu, MD, MSc

#### ***Assistant Professor***

Huo Lu, PhD

### ***Biochemistry and Molecular Biology***

#### ***Professor***

Gary H. Watson, PhD

#### ***Assistant Professor***

Francis E. Jenney Jr., PhD

### ***Emergency Medicine***

#### ***Clinical Associate Professor***

John D. Rowlett, MD

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Michael Mudrey, DO  
Lisa P. Murphy, MD  
Steven G. O'Mara, DO  
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Dwayne Washington, MD  
Julia A. Wilson, MD

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Eric A. Deal, DO  
Marlon G. Fisher, MD  
Jeffrey E. Greenwood, MD  
Thomas J. Isenovski, DO  
Tiencia D. James, MD  
Sofia A. Khan, MD  
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Vibhuti A. Ansar, MD  
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Kenneth J. Howard, MD  
Julie A. Hundertmark, MD  
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Richard L. Sample, DO  
Frank B. Saucier, MD  
Richard M. Schlossberg, MD  
Terry S. Schwartz, DO  
Wayne Scott, DO  
James Seale, MD  
Michael Sein, DO  
George W. Shannon, MD  
John Shih, DO  
David P. Smith, MD  
Horace G. Smith, MD  
Leon F. Smith, MD  
Y. Monique Smith, MD  
William C. Stevens, DO  
Beth A. Sullivan, DO  
Michael E. Suls, DO  
Melvin H. Thomas, MD  
Melissa D. Thompson, MD  
Jacob Varghese, MD  
Andrew A. Waldman, MD  
Paul Lance Walker, DO  
Michael F. Walsh, MD  
Charles L. White, DO  
Frankie K. Whittington, MD  
Rembert A. Williams, MD  
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Scott T. Keller, DO  
Alison A. Lauber, MD  
Joseph R. Lewis, MD  
James E. Luckie Jr., DO  
John-Mark Miller, DO  
Norvin Ila Ona, DO  
Dave A. Ringer, MD  
Marcus C. Roberts, MD  
Michael A. Rosemore, DO  
Harvey J. Schecter, DO  
Bruce R. Schober, DO  
Linnette J. Sells, DO  
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Patricia J. Tygrett-Sue, DO  
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William A. Woolery, DO, PhD  
Amber Zafar, MD, MPH

***Geriatric Medicine***

***Clinical Assistant Professor***

Ali R. Rahimi, MD

***Clinical Instructor***

Gregory A. Foster, MD

## **Internal Medicine**

### ***Clinical Professor***

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### ***Clinical Associate Professors***

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Miguel R. Arguedas, MD

Martin L. Austin, MD

Waindel Belizaire, DO

Alan L. Bier, MD

Milton D. Boden, MD

Adam M. Bressler, MD

Leopold G. Campbell, MD

Murtaza V. Cassoobhoy, MD

Tarun K. Chaudhury, MD

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Jerry L. Cooper, MD

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Neelima Dachuri, MD

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Guy T. Easterling, DO

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Suku George, MD

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Patricia M. Haibach, DO  
Paul W. Hanna, DO  
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Franklin Harris, MD  
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Duan Huang, MD  
Fred D. Hunker, MD  
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Mark A. Jester, MD  
Indie F. Jones, MD  
Steven L. Kanner, DO  
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Rahil Kazi, MD  
Craig M. Kubik, DO  
Mark B. Kukler, DO  
Arvind Arun Kulkarni, MD  
James C. Lamon, MD  
Ishmael Lamptey-Mills, MD  
Anthony M. Landis, DO  
Frank J. Lauro, DO  
Jimba Lawson, MD  
James S. Lee, MD  
Jacob D. Levy, MD  
Gaeton D. Lorino, MD  
Thomas G. McCleary, DO  
Maria J. Martinez, MD  
Avishai Mendelson, MD  
Gregory V. Miller, MD  
Adrian M. Mogos, MD  
Mylena E. Morton, MD  
Gary Myrthil, MD  
Peter K. Nam, MD  
Syed Hasan Raza Naqvi, MD  
Nina P. Nelson-Garrett, MD  
William A. Nish, MD  
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Okoronkwo U. Ogan, MD  
Joel A. Onafowokan, MD  
Shalini J. Pandey, MD  
Lori A. Parker, DO  
Bipinchandra M. Patel, MD  
Joseph R. Perez, DO

Michael H. Press, DO  
Mack J. Rachal, MD  
Syed K. Raza, MD  
Lisa C. Robbins, MD  
William P. Saliski Jr., DO  
Thomas J. Salvucci, DO  
Rotimi B. Samuel, MD  
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Karuna P. Shah, DO  
Ravindraprasad J. Shekarappa, MD  
Leilani G. Shivers, MD  
Quinn A. Simien, MD  
Paul Skokanic, MD  
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Cindy B. Starke, MD  
Heidi L. Strouth, MD  
Stephen M. Szabo, MD  
Harold M. Szerlip, MD  
Lacey M. Thomas, MD  
David R. Thrasher, MD  
Sergio R. Vega, MD  
Jonathan J. Velasquez, MD  
Eric S. VonHolten, DO  
Jim R. Wade, MD  
Daren C. Wannamaker, DO  
Michael D. Warlick, DO  
Mary E. Wiles, MD  
Dennis N. Wilson, MD  
Kenneth J. Wool, MD  
Robert P. Wright, MD  
Bedri M. Yusuf, MD

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Lorraine Brown, DO  
Carrie M. Collins, DO  
Robin H. Dretler, MD  
Alan D. Einstein, DO  
Gary L. Fink, MD  
Bill B. Hollins, DO  
William L. Horton, DO  
Robert H. Hummer, MD  
Eileen D. Javellana, MD  
Lisa R. Jue, MD



Kimbery A. Kasow, DO  
Raymond C. McKoy, DO  
Nabil W. Malek, DO  
Edward A. Matthews, DO  
Taffere N. Mihretu, MD  
Garfield A. Miller, MD  
Luis A. Murrain, DO  
Sudeshna Nandi, MD  
Vincent M. Nicolais, MD  
Anbu Pandian, MD  
Scott B. Parry, DO  
Cynthia L. Phillips, DO  
Abdul Qadir, MD  
Jamie D. Rich, MD  
Jeffrey Z. Rymuza, MD  
Mark A. Senger, DO  
Alexander Shiteiman, MD  
Rondalph S. Taylor, MD  
Paayal M. Vyas, MD  
Marta J. Wayt, DO

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Brian M. Matayoshi, PhD  
Mary P. Owen, PhD, JD

#### ***Clinical Professor***

Donald W. Penney, MD

#### ***Assistant Professor***

Adwoa Dansoa Aduonum, PhD

### **Obstetrics and Gynecology**

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Michael R. Watkins, MD

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David W. Adcock, MD  
Richard L. Allen, MD  
Robert A. Brown, MD  
Ellen C. Eanes Courson, MD  
Michael S. Dempsey, MD

Louis R. Fernandez, MD  
Christian D. Geltz, DO  
Meg Hainer, MD  
Kendall M. Handy, MD  
Carlo Chun Kit Lee, MD  
Julian E. McIntyre, MD  
Sheriff Malek, DO  
Lionel Meadows, MD  
Robert D. Moore, DO  
Evert H. Oortman, DO  
Denise B. Pecht, MD  
Victor E. Pena, MD  
Leslie Pope, DO, MBA  
Nicolas Psomiadis, MD  
Stephen s. Salmieri, DO  
Robert A. Stauffer, MD  
George E. Stefenelli, DO  
Stephen T. Vermillion, MD  
Timothy P. Villegas, MD  
Gregory A. Waller, MD  
Allison Hall Wright, MD  
Cheryl A. Zimmerman, DO

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Amber C. French, DO  
Charles Johnson, DO  
Tan-Loe Phuo Nguyen, MD  
G. V. Raghu, MD  
Brandon L. Reynolds, DO  
Matthew A. Roberts, DO  
Thekkepat G. Sekhar, MD  
Manoj H. Shah, MD  
Victoria A. Shirley, DO  
Vijaya L. Vella, MD  
Colleen R. Wells, DO

***Osteopathic Manipulative Medicine***

***Professor***

Walter C. Ehrenfeuchter, DO

***Clinical Professor***

Michael P. Rowane, DO

***Assistant Professor***

Murray R. Berkowitz, DO

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Marla D. Golden, DO

Joan Radjieski, DO

**Otorhinolaryngology, Facial Plastic Surgery  
and Head/Neck Surgery**

***Clinical Associate Professor***

Robert B. Contrucci, DO

***Clinical Assistant Professors***

John G. Nino, MD

Neil A. Persaud, DO

Alan B. Whitehouse, MD

***Clinical Instructors***

Joel J. Alexander, DO

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**Pathology, Microbiology and Immunology**  
***Professor***

Bonnie A. Buxton, PhD

***Assistant Professors***

Randal K. Gregg, PhD

Karim Z. Zaman, DO

**Pediatrics**

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Sudhira A. Kulatunga, MD  
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Melanie H. Wills, MD  
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Ann O. Idemundia, MD  
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Kevin K. Niebaum, DO  
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Mohammed A. Memon, MD

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Maryjo Eline, DO  
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Cynthia J. Lorino, MD  
David C. Montiel, MD  
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Andrew S. Leopff, DO  
Gary A. Levengood, MD  
Kristine Lombardozzi, MD  
Norman F. McGowin, MD  
Miles H. Mason III, MD  
Edmund M. Molnar, MD  
Charles B. Moomey Jr., MD  
Brian E. Morgan, MD  
William P. Pannell, MD  
Jeffrey R. Pyne, DO  
Rhett K. Rainey, DO  
Barry M. Renz, MD  
Donald H. Rosenbaum, DO  
Ranjan S. Roy, MD

Stephen W. Samuelson, MD  
Robert J. Sass, DO  
David Schmidt, MD  
Paul Seltzer, DO  
Andrew C. Shatz, MD  
Charles E. Singleton, MD  
Morton Slutsky, MD  
Kenneth L. Smith, MD  
Michael S. Smith, MD  
Kenneth S. Stewart, DO

***Clinical Assistant Professors***

Michael T. Thompson, MD  
Terry A. Treadwell, MD  
Christopher M. Vaughn, MD  
Arnold J. Weil, MD  
David M. Whiteman, MD

***Clinical Instructors***

Michael S. Champney, MD  
Vincent S. Culpepper, MD  
Marc S. Eskin, DO  
Maurice Jove, MD  
Glenn G. Kasow, DO  
John P. Kelley, DO  
Walid A. Khuri, MD  
Thomas K. McBride, MD  
Virgle W. McEver III, MD  
Craig M. Mines, MD  
Arie E. Pelta, MD  
Norman Rose, DO  
Kenneth Stewart, DO  
Michael C. Thompson, MD  
Phillip K. Wells, DO



## **FACULTY COMMITTEES – 2010-2011**

Academic Appeals  
Academic Planning and Budget  
Academic Policy and Promotion  
Admissions  
Appointment, Promotion and Tenure  
Bylaws  
Committee on Committees  
Discipline  
Diversity  
DO Admissions  
DO Curriculum  
Graduate Admissions  
Graduate Curriculum  
Grievance  
Honors and Awards  
Learning Resources  
Research  
Student Aid

## **REGULATORY COMMITTEES – 2010-2011**

Human Studies (Institutional Review Board)  
Institutional Animal Care and Utilization  
Institutional Environmental Health and Safety

## ALUMNI ASSOCIATION

The Alumni Association of PCOM was formed on September 8, 1902, three years after the first physician graduated from Philadelphia College and Infirmary of Osteopathy. The purpose of the Alumni Association is to act as a liaison between the College and its more than 9,000 living DO alumni and 1500 graduate program alumni who practice throughout the United States, in eleven foreign countries and in every branch of the military service. In addition, the association encourages the promotion of PCOM to prospective students and provides financial support for excellence in osteopathic and healthcare education. Contributions to the Alumni Association support the increasingly critical programs and services underwritten by the association.

Throughout the year, the Alumni Association sponsors programs that benefit its members and current students. An active interest is taken in student life. Upon request, information is provided on PCOM alumni to students pursuing electives, mentors and preceptorships across the country.

The Alumni Association supports the annual PCOM Golf Classic and underwrites a large portion of the expenses associated with the annual Reunion Weekend and other events throughout the year.

The Alumni Association is governed by an Executive Committee and Board of Directors, composed of elected representatives from regional districts around the United States. Meetings are held twice a year, in January, and June. All alumni of Philadelphia College of Osteopathic Medicine are members of the Alumni Association.

Alumni Association programs and services are supported by alumni and the College. The Office of Alumni Relations and Development administers the Alumni Association and keeps alumni notified of key developments. The office maintains the alumni database and supports special events for alumni on campus and at national and regional conferences.

For more information, please contact:

Office of Alumni Relations  
Philadelphia College of Osteopathic Medicine  
4180 City Avenue  
Philadelphia, PA 19131  
215-871-6120 or 800-739-3939