





# 2016–2017 CATALOG



# PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

### PHILADELPHIA CAMPUS

4170 City Avenue • Philadelphia, PA 19131 Office of the Provost 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 Chief Campus Officer 678-225-7500 • FAX 678-225-7526 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 May 2015. 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. The College also publishes student handbooks containing more detailed information about its policies, procedures and organizations.

## PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE 2016–2017 CATALOG

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## PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE 2016–2021 CALENDAR

Academic year calendars are provided as guides and subject to change.

Academic terms apply only to the coursework or non-clinical component of degree programs. Third and fourth year DO clinical rotation schedules, second year Physician Assistant clinical preceptorships and fourth year Pharmacy experiential learning schedules are provided by the respective academic department or school.

#### CALENDAR 2016-2017

SUMMER 2016 June 4 July 4 August 12	Saturday Monday Friday	Summer term begins Independence Day holiday Summer term ends	
FALL 2016 August 15 September 5 November 11 November 12–20	Monday Monday Friday Sat–Sun	Fall term begins Labor Day holiday Fall term ends Term Break	
WINTER 2016 November 21 November 24-25 November 28 December 24-January 2 January 3 January 16 February 24 February 25–March 5	Monday Thurs-Fri Monday Sat-Mon Tuesday Monday Friday Sat–Sun	Winter term begins Thanksgiving holiday Classes resume Winter holiday Winter classes resume Martin Luther King holiday Winter term ends Term Break	
SPRING 2017 March 6 May 29 June 2	Monday Monday Friday	Spring term begins Memorial Day holiday Spring term ends	
CALENDAR 2017–2018 SUMMER 2017 June 5 July 4 August 11	Monday Tuesday Friday	Summer term begins Independence Day holiday Summer term ends	
FALL 2017 August 14 September 4 November 10 November 11-19	Monday Monday Friday Sat–Sun	Fall term begins Labor Day holiday Fall term ends Term Break	
WINTER 2017 November 20 November 23-24 November 27 December 23-January 1 January 2 January 15 February 23 February 24-March 4	Monday Thurs-Fri Monday Sat-Mon Tuesday Monday Friday Sat–Sun	Winter term begins Thanksgiving holiday Classes resume Winter holiday Winter classes resume Martin Luther King Winter term Ends Term Break	

## PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE 2016–2021 CALENDAR

#### CALENDAR 2017–2018 (continued)

SPRING 2018 March 5 May 28 June 1

Friday Monday Friday

#### CALENDAR 2018-2019

SUMMER 2018

June 4 July 4 August 10

FALL 2018

August 13 September 3 November 9 November 10–18

WINTER 2018 November 19 November 22-23 November 26 December 22-January 1 January 2 January 21 February 22 February 23–March 3

#### SPRING 2019

March 4 May 27 May 31

#### CALENDAR 2019-2020

SUMMER 2019 June 1 July 4 August 9

#### FALL 2019

August 12 September 2 November 8 November 9–17

#### WINTER 2019

November 18 November 28-29 December 2 December 21-January 1 January 2 January 20 February 28 February 29–March 8 Monday Wednesday Friday

Monday Monday Friday Sat–Sun

Monday Thurs-Fri Monday Sat-Tue Wednesday Monday Friday Sat-Sun

Monday Monday Friday

Saturday Thursday Friday

Monday Monday Friday Sat–Sun

Monday Thurs-Fri Monday Sat-Wed Thursday Monday Friday Sat–Sun Spring Term begins Memorial Spring term ends

Summer term begins Independence Day holiday Summer term ends

Fall term begins Labor Day holiday Fall term ends Term Break

Winter term begins Thanksgiving holiday Classes resume Winter holiday Winter classes reume Martin Luther King holiday Winter term ends Term break

Spring term begins Memorial Day holiday Spring term ends

Summer term begins Independence Day holiday Summer term ends

Fall term begins Labor Day holiday Fall term ends Term Break

Winter term begins Thanksgiving holiday Classes resume Winter holiday Winter classes resume Martin Luther King holiday Winter term ends Term Break

## PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE 2016–2021 CALENDAR

#### CALENDAR 2019–2020 (continued)

	<u>ontinuea)</u>	<u>CALENDAR 2019–2020 (continued)</u>			
SPRING 2020 March 9 May 25 June 5	Monday Monday Friday	Spring term begins Memorial Day holiday Spring term ends			
<u>CALENDAR 2020–2021</u> SUMMER 2020 June 8 July 3-4 August 14	Monday Friday-Sat Friday	Summer term begins Independence Day Summer term ends			
FALL 2020 August 17 September 7 November 13 November 14-22	Monday Monday Friday Sat-Sun	Fall term begins Labor day holiday Fall term ends Fall term break			
WINTER 2020 November 23 November 26-27 November 30 December 24-January 3 January 4 January 18 February 26 February 27-Mar 7	Monday Thurs-Fri Monday Thurs-Sun Monday Monday Friday Sat-Sun	Winter term begins Thanksgiving holiday Classes resume Winter holiday Winter classes resume Martin Luther King holiday Winter term end Winter Break			
<b>SPRING 2021</b> March 8 May 31 June 5	Monday Monday Saturday	Spring term begins Memorial Day Spring term ends			

#### CALENDAR 2021-2022

SUMMER 2021 June 7 July 4-5 August 13

Monday Summer term begins Sun-Monday Independence holiday Friday Summer Term ends

#### FALL 2021

August 16

Monday

Fall term begins

## PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

#### MISSION AND GOALS

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 sources requiring skills in the use of information technology.
- Students will develop recognition of their legal and ethical obligations as professionals and will be able to apply an understanding of public policy and the social, cultural and economic factors that impact their field of study.

#### 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 professions of osteopathic medicine and pharmacy.

#### INSTITUTIONAL DIVERSITY STATEMENT

As active citizens in a multicultural world, the PCOM community cultivates an environment of inquiry, inquisitiveness and respect, promotes discovery and celebration of our differences and fosters appreciation of the rich social fabric that binds us together.

#### THE COLLEGE

When osteopathic schools were forming throughout the country in the 1890's, 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.

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. Today, more than 800 graduate students are enrolled in PCOM's masters and doctoral degree programs. PCOM's graduate students pursue studies at the master's level in biomedical sciences, mental health counseling, 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 its studies at Georgia Campus – Philadelphia College of Osteopathic Medicine (GA-PCOM), the College's 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 established at the Georgia Campus in the 2006-2007 academic years, the PCOM School of Pharmacy opened at the Georgia Campus in Fall 2010 and the Physician Assistant program opened at the Georgia Campus In Summer 2016.

The osteopathic medical programs train 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. 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 highly skilled diagnosticians, are represented throughout the United States and in all branches of military service.

Nearly 70 percent of main campus students are Pennsylvanians, and 75 percent of 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.

## DEGREES AND CERTIFICATES AWARDED

#### DOCTORAL DEGREES

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 and Doctor of Psychology – School Psychology (MS) (PSYD) Five Year Combined Program – Philadelphia Campus

#### RESPECIALIZATION

Respecialization in School Psychology

Philadelphia Campus

Respecialization in Clinical Psychology – Philadelphia Campus

#### EDUCATIONAL SPECIALIST DEGREE

Educational Specialist in School Psychology (EdS) – Philadelphia Campus

Master of Science and Educational Specialist (MS) (EDS) Three Year Combined Program – Philadelphia Campus

#### MASTER OF SCIENCE DEGREES

Master of Science in Aging and Long Term Care (MS) – Philadelphia Campus

Master of Science in Biomedical Sciences (MS)

- Philadelphia and Georgia Campuses

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

- Philadelphia Campus

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

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

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

Master of Science in Mental Health Counseling (MS) – Philadelphia Campus

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

Master of Science in Public Health Management and Administration (MS) – Philadelphia Campus

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

Clinical Master of Science (MSc) – Philadelphia Campus

#### POSTDOCTORAL CERTIFICATES

Post-Doctoral Certificate in Clinical Health Psychology – Philadelphia Campus

Post-Doctoral Certificate in Clinical Neuropsychology – Philadelphia Campus

#### CERTIFICATES

Certificate of Graduate Studies (CGS) and Certificate of Advanced Graduate Studies (CAGS)

Aging and Long Term Care Administration – Philadelphia Campus

Applied Behavior Analysis – Online Program

Cognitive Behavioral Therapy – Philadelphia Campus

Organizational Development and Leadership – Philadelphia and Georgia Campuses Professional Psychology

- Philadelphia Campus

Public Health Management and Administration – Philadelphia Campus

#### POSTDOCTORAL MEDICAL EDUCATION TRAINING PROGRAMS

#### Internship Program

Traditional Rotating General Surgery Internal Medicine Neurosurgery Ophthalmology Orthopedic Surgery Otolaryngology

#### **Residency and Fellowship Programs**

Family Medicine General Surgery Geriatrics Hospice and Palliative Medicine Internal Medicine Neuromusculoskeletal Medicine +1 Neurosurgery Ophthalmology Orthopedic Surgery Otolaryngology Plastic and Reconstructive Surgery Reproductive Endocrinology and Infertility Surgical Critical Care Vascular Surgery

#### **Continuing Education**

#### Continuing Medical Education

#### 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 a member of the faculty, staff or administration 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 student may immediately be withdrawn from all activities. The President or Provost may place the student in question on immediate 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, under the Nonpublic Postsecondary Educational Institutions Act of 1990.

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. The clinical psychology internship program in PCOM's Center for Brief Therapy is also APA accredited. The doctoral, educational specialist and MS 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. Certification in Behavior Analysis available to students in the MS in School Psychology program is approved by the Behavior Analyst Certification Board (BACB). 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.

PCOM's School of Pharmacy's Doctor of Pharmacy program is accredited by the

Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60503, 312-664-3575; fax 312-664-4652; website www.acpe-accredit.org.

Documents of accreditation are on file in the President's Office, with copies in the Office of the Provost, and may be seen upon request.

#### Memberships

PCOM is a member of the American Council on Education, the American Association for Higher Education, the Council for the Advancement and Support of Education, the Association of Academic Health Centers, the American Association of Colleges of Osteopathic Medicine, the American Association of Colleges of Pharmacy, the National Council of Schools and Programs of Professional Psychology, the Physician Assistant Educational Association, the Association of Independent Colleges and Universities of Pennsylvania and the Association of Governing Boards of Universities and Colleges.

## 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.

#### State Departments of Education Complaint Information

PCOM is authorized by the Pennsylvania Department of Education and the Georgia Nonpublic Postsecondary Education Commission. These state education agencies have a formal process for complaints regarding noncompliance with state regulations. In accordance with the Higher Education Opportunity Act, the following contact information is provided for both agencies:

Commonwealth of Pennsylvania Bureau of Postsecondary and Adult Education Pennsylvania Department of Education 333 Market Street, 12th Floor Harrisburg, PA 17126-0333 717-772-3622 (FAX) www.education.state.pa.us

State of Georgia Nonpublic Postsecondary Education Commission 2082 East Exchange Place, Suite 220 Tucker, GA 30084-5305 770-414-3300 770-414-3309 (FAX) gnpec.org

## OFFICERS OF THE COLLEGE

President and Chief Executive Officer Jay S. Feldstein, DO '81
Provost, Senior Vice President for Kenneth J. Veit, DO '76, MBA Academic Affairs and Dean
Vice President for Finance Peter Doulis, CPA and Chief Financial Officer
Vice President for Graduate Programs Robert G. Cuzzolino, EdD and Planning
Chief Advancement Officer Carrie Collins, JD
Chief Diversity Officer (Vacant)
Chief Legal Affairs Officer David F. Simon, JD
Dean and Chief Academic OfficerH. William Craver III, DO Osteopathic Medical Program, Georgia Campus
Dean and Chief Academic Officer Mark P. Okamoto, PharmD School of Pharmacy, Georgia Campus
Chief Campus Officer, Georgia Campus R. Bryan Ginn Jr.

## **BOARD OF TRUSTEES**

## Members of the Board

Michael A. Becker, DO '87 \* James H. Black, DO '62, LLD (Hon.) John B. Bulger, DO '95, MBA Joseph A. Dieterle, DO '70 Matthew O. Elkes Jay S. Feldstein, DO '81 Thomas J. Gravina, Vice Chiarman Jerel A. Hopkins, JD John P Kearney, LLD (Hon.), Chairman Joseph J. Kuchinski, DO '86\*\* Lavinia Lafferty Vincent Lobo, DO '65 R. David McCleskey A. Scott McNeal, DO '88 Andrea D. Pedano, DO '90 Wayne T. Sikes Kenneth J. Veit, DO '76, MBA Murray Zedeck, DO '62 Lavina Lafferty, Executive Assistant to the President and Secretary

\*Faculty Representative \*\*Alumni Representative

## ADMINISTRATION

President and Chief Executive Officer Jay S. Feldstein, DO
Provost, Senior Vice President for Kenneth J. Veit, DO, MBA Academic Affairs and Dean
Vice President for Finance Peter Doulis, CPA and Chief Financial Officer
Vice President for Graduate Programs Robert G. Cuzzolino, EdD and Planning
Dean and Chief Academic Officer H. William Craver III, DO Osteopathic Medical Program, Georgia Campus
Dean and Chief Academic Officer Mark P. Okamoto, PharmD School of Pharmacy, Georgia Campus
Chief Admissions Officer Deborah A. Benvenger, MBA
Chief Risk Management Officer Laura G. Bell
Chief Advancement Officer Carrie Collins, JD
Chief Research and Sponsored Jane Z. Dumsha, PhD Programs Officer
Chief Library Services Officer Stephanie B. Ferretti, MLS
Chief Campus Officer, Georgia Campus R. Bryan Ginn Jr.
Chief Academic Technology Officer Erik Langenau, DO, MS
Chief Diversity Officer (Vacant)
Chief Compliance Officer Allan McLeod, DO, JD, MBA
Chief Human Resources Officer Edward J. Potts, MA
Chief Program Development and ProfessionalBenjamin Robinson, MPA Relations Officer
Chief Marketing and Communications Wendy W. Romano Officer
Chief Legal Affairs Officer
Chief Research and Scientific Officer Mindy George-Weinstein, PhD

Chief Technology Operations Officer James A. Williams, MS
Chief Facilities Officer Frank H. Windle
Chief Financial Aid Officer
Chief Student Affairs Officer
Vice Dean for Clinical Education Richard A. Pascucci, DO and Chief Academic Officer, PCOM MedNet
Associate Dean, OsteopathicBonnie A. Buxton, PhD Curriculum and Chair, Division of Basic Sciences, Osteopathic Medical Program, Georgia Campus
Associate Dean for Clerkships and Core Site Murray R. Berkowitz, DO, MA, MS, MPH Development, Georgia Campus
Associate Dean to Clinical Integration, Michael J. Sampson, DO Georgia Campus
Associate Dean, Osteopathic Curriculum Kerin Fresa, PhD Philadelphia Campus
Associate Dean, OsteopathicJoseph Kaczmarczyk, DO, MPH Undergraduate Education, Philadelphia Campus
Associate Dean for Academics Naushad M. Khan Ghilzai, PhD and Assessment, School of Pharmacy, Georgia Campus
Associate Dean for Graduate Medical David Kuo, DO Education and Director of Medical Education
Assistant Dean, Professional Michael Lee, PhD and Student Affairs, School of Pharmacy, Georgia Campus
Regional Assistant Dean, Geisinger John Bulger, DO Health System
Regional Assistant Dean, Georgia Campus Marla DePolo Golden, DO
Director of Admissions, Craig S. Brown, JD Georgia Campus Director of Financial Operations John J. Carlin, MBA
Designated Institutional Official Joanne Jones and Executive Director PCOM MedNet

Director of Security and Public Safety Richard A. Kralle
Director of Student Services, Patience Mason, MEd Georgia Campus
Director of Financial Reporting C. Andrew Mueller, MBA and Planning
Director of Animal Facility James J. Wood
Registrar Deborah A. Castellano, MS

## ADMISSIONS POLICIES AND PROCEDURES

## Doctor of Osteopathic Medicine (DO)

Admission to PCOM is comprehensive as well as competitive.. Acceptance by the Faculty Committee on Admissions is based on the applicant's fulfillment of undergraduate course requirements, grade point averages (GPA), Medical College Admission Test (MCAT) scores, pre-health advisor letter of recommendation, essay, resume and a personal interview with the committee.

PCOM seeks well-rounded, achievement-oriented persons whose character, maturity and sense of dedication point to a successful and 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: biology and physics.
  - Sixteen semester hours of Chemistry, including four semester hours of laboratory; at least four of the sixteen required semester hours must be organic chemistry (with lab) and at least three semester hours must be biochemistry.
  - Six semester hours of English composition and literature.
    - Official exam scores from the Medical College Admissions Test (MCAT). Prospective students are urged to take the test as early as possible and no later than September of the year prior to matriculation. For those who are submitting an updated test score, a January test date will be accepted. The MCAT must be taken within three years of the desired date of matriculation. For 2017 enrollment, exams taken **before August 2014** will not be accepted to complete an applicant record.

#### Application Steps and Schedule

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

Beginning in May, prospective osteopathic medical students may submit their application

through a secure Web server, AACOMAS-Online, at www.aacom.org. The AACOMAS application should be complete and indicate the campuses 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 and verified by AACOMAS. A full AACOMAS application must be e-submitted, completed and verified by February 1st, 2017 to be considered for admission to PCOM and/or GA Campus - PCOM.

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 electronic form must be completed, signed and returned for each campus application. PCOM also requires an application fee of \$75 for each campus applied to.

A candidate must fulfill a letter of recommendation requirement which is as follows: Letter of recommendation from the pre-health or academic advisor/committee (undergraduate, post-baccalaureate or graduate programs). This is preferred by the DO Faculty Committee on Admissions

#### OR

Three faculty letters of recommendation: Two of those three letters must be from BASIC SCIENCE professors (undergraduate, post-baccalaureate or graduate programs). Please note that the faculty letters must be from a professor that issued a grade in a course that appears on the applicant's institutional transcript. The course number and title must be noted in the letter.

A letter of recommendation from an osteopathic physician is strongly suggested but not required.

The supplemental application and all required materials (including the application fee(s)) must be received by March 1, 2017. However, early submission is strongly recommended as interviewees are selected and decisions are rendered on a rolling basis.

#### 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 generally begin in mid-September and continue through the end of March. Interview sessions are on-campus events that include an opportunity to meet with student ambassadors and tour the campus. PCOM conducts a panel interview that generally includes the applicant and other members of the committee, and lasts about one half hour.

#### Admissions Decisions

Interviewed candidates are usually notified within five weeks 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 May 14 will have 14 days.
- Those accepted on or after May 15 may be asked for an immediate deposit.

An additional deposit of \$1,500 is required by 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 requires all first year students to complete a criminal background check prior to matriculation. All students must have their criminal background checks processed through a PCOM vendor of choice. The Admissions Office must have this information on file prior to orientation; students will not be permitted to start classes without this information.

#### Transfer Students and Advanced Standing

PCOM does not routinely accept transfer students; however, a transfer application may be considered under extenuating circumstances and depending on seats 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 and has completed two years of study, or who is eligible for re-admission to the previously attended college of osteopathic medicine. COMLEX 1 must have a passing grade prior to matriculation at PCOM if the student is accepted by the Faculty Committee on Admissions.

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.

For all other students entering the DO program, PCOM does not grant advanced standing or credit for prior learning or for courses completed at other institutions.

## ADMISSIONS POLICIES AND PROCEDURES

### Doctor of Pharmacy (PharmD)

Admission to PCOM School of Pharmacy is competitive and selective. PCOM seeks wellrounded, 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, essay, resume and a personal interview.

#### Requirements for Admission

Satisfactory completion of the required prerequisite coursework from a regionally 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 2.25 or higher on a 4.0 scale for all undergraduate coursework completed. All science and math prerequisites must have been completed within the past 10 years with a letter grade of C or higher. There is no minimum score for the PCAT; however, composite scores less than 40% 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 credits*	S
(Cellular Biology, Molecular Biology or Zoology with live lab is also acceptable)	
General Chemistry I and II with live lab	S
Organic Chemistry I and II with live lab	S
Physics with lab	S
Calculus	S
Statistics	
English	S
(6 credits Composition or 3 credits Composition and 3 credits Literature)	
Economics	
Speech	S
Social/Behavioral Science	S
(e.g., History, Psychology, Sociology, Ethics)	
Humanities	S
(e.g., Art, Foreign Language, Music, Religion) Electives	S

\*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 PharmD program should be directed to PCOM's Office of Admissions. PCOM School of Pharmacy participates in the centralized Pharmacy College Application Service (PharmCAS) for applicants applying to colleges and schools of pharmacy. Application to PCOM School of Pharmacy consists of a completed PharmCAS Application and a PCOM School of Pharmacy Supplemental Application.

Beginning in July, prospective pharmacy students may submit their application through

PharmCAS at www.pharmcas.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 the first Monday in March (or designated deadline on the PCOM PharmCAS school page) 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 submitted by 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 is received in the Office of Admissions, the application will be considered complete. Early application and fulfillment of all requirements are 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 in Suwanee, Georgia and are scheduled by e-mail using the e-mail address indicated on the student's admissions application. PCOM School of Pharmacy may also conduct face-to- face interviews at designated off-campus locations as needed. Please check e-mail frequently and be sure to notify the Office of Admissions of any change.

Interviews begin in October and continue until the class has been selected. Students are required to present a valid government-issued ID upon arrival. 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 lasts approximately thirty minutes with faculty members from the School of Pharmacy.

#### 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 may participate in an Early Decision Program through PharmCAS. Details on Early Decision Programs can be found on the PCOM School of Pharmacy PharmCAS web page.

PCOM requires all first year students to successfully complete both a criminal background check and drug screen 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 notified as to how and when to begin the process.

#### Transfer Students and Advanced Standing

PCOM School of Pharmacy does not routinely accept transfer students; however, a transfer application may be considered under extenuating circumstances and depending on availability. Consideration will be given only to a student who is in good standing at an ACPE-accredited college or school of pharmacy or who is eligible for readmission to the previously attended college or school. Students who have been on probation,

suspended or involved in any adverse action as a result of conduct violations or academic dishonesty are not eligible for transfer.

To initiate a transfer, students should send a letter detailing the reason for the transfer request to the PCOM School of Pharmacy, Associate Dean for Academics and Assessment along with an official transcript of all coursework in the college/school of pharmacy and a letter from the Dean of the college/school of pharmacy that the student is currently enrolled in stating that the student is currently in good standing and has never been on probation, suspended or had any adverse action taken as a result of conduct violations or academic dishonesty. A formal interview with the Admissions Committee will be required and the committee will decide whether to accept the transfer student and grant, if appropriate, credit for courses successfully completed at the previous college/school that meet PCOM's curriculum requirements. A minimum of two years must be completed at PCOM School of Pharmacy for a student to be eligible to receive the PharmD degree.

#### Georgia Pharmacy Intern License

Students must obtain and maintain a valid, current Pharmacy Intern License issued by the Georgia State Board of Pharmacy. This license must be obtained prior to the beginning of the Winter term of the first professional year. Licensing by the Georgia State Board of Pharmacy is not guaranteed by PCOM or PCOM School of Pharmacy.

## ADMISSIONS POLICIES AND PROCEDURES

#### GRADUATE DEGREE PROGRAM 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.

#### CASPA

Philadelphia College of Osteopathic Medicine (PCOM) participates in the Centralized Application Service for Physician Assistants (CASPA). You may obtain additional information about CASPA and apply online at CASPA. CASPA applications become available for 2016-2017 enrollments on April 27, 2016. All applications must be e-submitted, completed, and verified by CASPA no later than December 1, 2016 for both Philadelphia and Georgia Campuses (separate application per campus). When applying to PCOM through CASPA, you will be required to complete PCOM specific questions before submitting.

All required application materials, including the \$75 PCOM application fee (one fee per campus) must be RECEIVED BY the Office of Admissions NO LATER THAN December 8, 2016 for Philadelphia and Georgia Campuses in order to be considered for admission. Note that the application fee can only be paid online through the link sent via email at receipt of a verified and completed CASPA application.

The Faculty Committee on Admissions recommends you submit a completed and verified CASPA application, which includes a PCOM specific question series, as soon as possible as we operate using a rolling admissions process.

#### Assessing Applicants for Interview Consideration

Completed and verified CASPA applications and supporting documents will be reviewed and individuals will be selected for an on-campus interview by the Faculty Committee on Admissions. Interviews will be offered to those who qualify compared against the applicant pool and successful completion of the following factors:

- Baccalaureate degree
- Prerequisite coursework
- Grade Point Averages (GPAs)
- Letters of recommendation
- Standardized test score (TOEFL)
- Healthcare experience
- Other considerations

An interview is required for admissions to the program and is typically conducted from September through February although interviews may be conducted before or after this timeframe. Selection for the PA program at PCOM is very competitive. The following requirements represent the minimum criteria for consideration for admission. Successful applicants will generally exceed the minimum criteria.

#### Baccalaureate Degree

All applicants must complete a baccalaureate degree, preferably in science or a healthrelated field, from a regionally accredited college or university in the United States, Canada or the United Kingdom prior to matriculation. Applicants must send official transcripts from all colleges and universities attended directly to CASPA. Once enrolled at PCOM, candidates must submit official copies of all college transcripts directly to the PCOM Office of Admissions.

#### Letters of Recommendation

Applicants must also submit three letters of recommendation directly to CASPA. Others may be sent as a PDF document to PCOM's Office of Admissions at recommend@pcom.edu. One recommendation MUST be from a Physician, Physician Assistant, or Nurse Practitioner in order to be considered for admission.

#### Standardized Test Scores

Standardized test scores are not required for admission with the exception of English language testing. Fluency in written and spoken English is essential for success in the program and to ensure patient safety. Applicants whose native language is not English must demonstrate objective competency in English within the past two years by satisfactory performance on the TOEFL examination. The minimum required score for the IBT (Internet Based Testing) is 79, with a minimum score of 26 for the speaking component.

- Applicants are exempt from the TOEFL requirement if:
- English was the exclusive language of instruction at the undergraduate level,
- They have earned a degree from a regionally accredited US college or university not more than 5 years prior to the anticipated semester of enrollment, or
- They have completed at least two (2) full-time semesters of graded coursework, exclusive of ESL courses, at an institution where English is the exclusive language of instruction not more than five (5) years prior to the anticipated semester of enrollment.

#### Prerequisite Coursework

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

COURSES REQUIRED	CREDIT HOURS	<u>NOTES</u>	
General Biology I*	4	Lab required	
General Biology II*	4	Lab required	
Other Biology Coursework	3		
Examples: Microbiology, Genetics, Cell Biolo	ogy, etc.		
Anatomy and Physiology	8		
Can be taken as separate courses or			
combined as Anatomy and Physiology I & I	Ι.	Labs required	
General Chemistry I*	4	Lab required	
General Chemistry II*	4	Lab required	
Other Chemistry Coursework3			
Examples: Organic Chemistry, Biochemistry			
Health-related Science Course or Physics	3		
Examples: Physics, Nutrition, Immunology, Virology, Microbiology, Genetics, Cell Biology, etc.			

#### COURSES REQUIRED

#### CREDIT HOURS

#### <u>NOTES</u>

Social Sciences9Examples: Psychology, Sociology, Anthropology, etc.Math6Statistics is considered an acceptable Math course

\* "General" coursework denotes the first two courses in the subject sequence for science majors.

All prerequisite coursework listed above must be completed prior to enrollment with a grade of at least a "C" or 2.0 on a 4.0 scale.

All science and math prerequisites must be completed within 10 years prior to June enrollment. (e.g., June 2007 or later)

Applicants must obtain an undergraduate science and cumulative grade point average of 3.00 or higher on a 4.0 scale (as calculated by CASPA).

One course cannot be used to satisfy multiple prerequisite courses.

AP coursework will be accepted provided the course and credits appear on your college transcript.

All courses must be completed at a regionally accredited institution.

The Program will accept credits completed at a community college.

The Program will accept courses completed online or on campus.

The Program will not accept prerequisite coursework completed as an audit or graded pass/fail.

#### The Program will not accept credits completed as CLEP courses.

At the time of application, candidates must have the prerequisite coursework completed or be able to provide a plan in writing that demonstrates the completion of the prerequisites prior to enrollment in the program (this can be achieved by completing the "Planned or In Progress Coursework" section of CASPA). Two science/math prerequisite courses may be "Planned or In Progress" at the time of application.

#### Healthcare Experience

To be considered for an interview, applicants must have a minimum of 200 hours of direct patient contact experience in volunteerism or employment in the healthcare industry, as documented through CASPA at the time of application. Candidates complete the requirement in a variety of ways, some of which include: working as a certified nursing assistant, phlebotomist, LPN, EMT, paramedic, scribe, medical translator, etc.

Many have experienced medicine overseas as volunteers in clinics. Any volunteer work or paid work in a clinical setting wherein candidates are either providing hands-on care or witnessing care first hand can be acceptable, depending on the nature of the role. Health care shadowing experiences are counted and highly recommended.

#### Other Considerations

Applicants with graduate degrees and/or five years of healthcare experience and/or other unique circumstances or qualifications may be considered, on an individual basis, for waiver of selected published prerequisite coursework. However, all candidates must have earned a baccalaureate degree prior to enrollment, excluding dual-degree candidates. Waiving of any criteria can only be assessed during the formal application review by the Faculty Committee on Admissions. Staff members of the Office of Admissions may not waive application requirements.

Applications are not accepted from individuals ineligible to be licensed as a Physician Assistant under the laws of the Commonwealth of Pennsylvania and the State of Georgia.

To ensure that students accepted to PCOM will be permitted to perform clerkships during their second year of study, and thus ensure them the opportunity to successfully complete their MS degree requirements, PCOM requires all first year PA students to complete a criminal background check prior to matriculation. All students must have their criminal background checks processed through a PCOM chosen vendor. The Admissions Office will send notification of the process after confirmation of enrollment and must have this information on file prior to orientation. Students will not be permitted to start classes without a criminal background check received and approved by the Office of Admissions.

#### Application Decisions

Candidates interviewed are evaluated based on multiple factors including: Academic ability Scholarly accomplishments Problem solving ability Decision making skills Maturity Potential for professional comportment Level of commitment to the profession Personal preparedness Congruence with program philosophy and mission The Admissions Committee reserves the right to accept or reject applications to the chosen program based on merit.

#### Notification of Acceptance or Alternate Status

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. Once admitted, candidates who wish to enroll are asked to review and acknowledge PCOM's Technical Standards for Admission and Matriculation and submit a \$500 non-refundable tuition prepayment online. The acceptance packet will contain all materials required for enrollment.

Applicants may be placed on the wait list after completion of the interview process. The wait list is not ranked or ordered. Typically, candidates are selected as seats become available from February until classes begin in June. After all expected candidates arrive for orientation in June, those not selected will be sent a final decision letter by mail.

#### Affiliation Agreements

PCOM Physician Assistant Studies program collaborates with two partner institution: the University of the Sciences (Philadelphia, PA) and Thomas University (Thomasville, GA). Students following this pathway matriculate into a physician assistant pre-professional

program, leading to a Bachelor of Science degree from the undergraduate institution. Students who meet progression standards of the undergraduate institution and the PCOM graduate program may then progress to the professional phase, leading to a Master of Science in Health Sciences from PCOM.

For requirements and details on the programs, please contact the undergraduate institution or follow the links below. University of the Sciences Thomas University

## Policy on Advanced Standing, Transfer of Credits and Experiential Learning and Graduates of Medical Schools

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

## ADMISSIONS POLICIES AND PROCEDURES

#### DOCTORAL AND GRADUATE DEGREE PROGRAMS Department of Psychology

The Department of Psychology Faculty Committee on Admissions utilizes a rolling admissions policy. Therefore, applications will be considered throughout the year as received until the desired enrollment has been achieved. However, those applications received prior to March 1 will be given priority. Applications can be submitted online by visiting the Apply Now link at admissions.pcom.edu. The Faculty Committee on Admissions screens the applications, invites some applicants for an interview, evaluates the applicants and selects the new students. 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

Doctor of Psychology in School Psychology Summer term only

MS and Doctor of Psychology in School Psychology 5 year Combined Program Summer term only

Educational Specialist in School Psychology Fall term only

Master of Science and Educational Specialist in School Psychology Summer term only

Master of Science in School Psychology Summer term only

Master of Science in Counseling and Clinical Health Psychology (MS) Fall Term Only

Master of Science in Counseling Studies Fall term only

Master of Science Mental Health Counseling (MS) Fall term only

Master of Science in Aging and Long Term Care Administration Fall term only

Master of Science in Organizational Development and Leadership Fall and Spring terms only Master of Science in Public Health Management and Administration Fall term only

Certificates of Graduate Studies and Certificates in Advanced Graduate Studies in:

Aging and Long Term Care Administration Applied Behavioral Analysis - Online Cognitive Behavioral Therapy Organizational Development and Leadership Professional Psychology Public Health Management and Administration

#### 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

3.3 grade point 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 Faculty Committee on Admissions uses the following information in making decisions concerning admission to the Clinical PsyD program:

- 1. Application including an autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. Three letters of recommendation with corresponding PCOM recommendation forms
- 4. Graded writing sample or professional report or evaluation

All materials must be forwarded to PCOM's Office of Admissions. Respecialization candidates who have already completed a doctoral degree in psychology may apply for admission using the same criteria as listed above. The timeline to complete the degree program will be determined upon a full application review.

#### 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 prior to matriculation.

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 Faculty Committee on Admissions uses the following information in making decisions concerning admission to the School PsyD program:

- 1. Application, including autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. Three letters of recommendation with corresponding PCOM recommendation forms
- 4. Scores from the PRAXIS II School Psychology Specialty Exam (5402)
- 5. Sample redacted psychological report
- 6. Copy of certification as a school psychologist
- 7. Copy of NCSP (Nationally Certified School Psychologist) certification if applicable

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

Respecialization candidates who have already completed a doctoral degree in psychology may apply for admission using the same criteria as listed above. The timeline to complete the degree program will be determined upon a full application review.

#### 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 Faculty Committee on Admissions uses the following information in making decisions concerning admission to the EdS program:

- 1. Application, including autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. Three letters of recommendation with corresponding PCOM recommendation forms
- 4. Official scores from GRE Psychology Test #81

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

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

An applicant to the master of science in school psychology program 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.

It is expected that students enter the school psychology program with adequate academic preparation to undertake graduate studies, and a knowledge base that is equivalent to an undergraduate major in psychology. Students entering the program must have:

- 6 credits of English
- 6 credits of Math
- 15 credits of psychology or relevant electives (such as techniques of teaching)

At the discretion of the Admissions Committee, students may be required to take additional prerequisite courses that would enhance their preparation for the graduate program.

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

- 1. Application, including autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. Three letters of recommendation with corresponding PCOM recommendation forms
- 4. Official scores from GRE or Miller's Analogies Test (PCOM institutional GRE code 2662). This requirement may be waived for applicants with a cumulative GPA of 3.3 or higher.

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

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

# Master of Science in Mental Health Counseling (MS)

An applicant must have successfully completed a bachelor's degree in psychology, counseling, social work, education or nursing 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 who have not completed a bachelor's degree in psychology must have completed, prior to admission, the following courses:

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

The Department of Psychology Faculty Committee on Admissions uses the following information in making decisions concerning admission to the MS program in Mental Health Counseling:

- 1. Application, including autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. Three letters of recommendation with corresponding PCOM recommendation forms
- 4. Official scores from GRE or Miller's Analogies Test (PCOM institutional GRE code 2662) This requirement may be waived for applicants with a cumulative GPA of 3.3 or higher.
- 5. Writing sample (preferably graded)

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

# Master of Science in Aging and Long Term Care Administration (MS)

An applicant to the master of science in aging and long term care administration program must have successfully completed a bachelor's degree from a regionally accredited college or university prior to matriculation.

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

- 1. Application, including an autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. One letter of recommendation with corresponding recommendation form
- 4. Curriculum vitae or resume

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 Faculty Committee on Admissions uses the following information in making decisions concerning admission to the MS program in Organizational Development and Leadership:

Application, including an autobiographical statement

- 1. Official transcripts of all undergraduate and graduate work
- 2. One letter of recommendation with corresponding recommendation form
- 3. Curriculum vitae or resume

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

# Master of Science in Public Health Management and Administration (MS)

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

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

- 1. Application, including an autobiographical statement
- 2. Official transcripts of all undergraduate and graduate work
- 3. One letter of recommendation with corresponding recommendation form
- 4. Curriculum vitae or resume

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

# ADMISSIONS POLICIES AND PROCEDURES

# GRADUATE DEGREE PROGRAM Department of Biomedical Sciences

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

The graduate programs in biomedical sciences utilize a rolling admissions policy. Therefore, applications will be considered throughout the year as received until the desired enrollment has been achieved. Each campus (Philadelphia and Georgia) has a separate application for the biomedical sciences program. Applications can be submitted online by visiting the Apply Now link at admissions.pcom.edu. The Faculty Committee on Admissions screens the applications, evaluates the applicants and selects the new students. 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.

All applicants to the Graduate Programs in Biomedical Sciences must have successfully completed a bachelor's degree from a regionally accredited college or university prior to matriculation. They must also have completed all undergraduate pre-professional science requirements (eight credit hours each of biology and physics) as well as 16 semester hours of chemistry coursework (including labs), four credits of which must be organic chemistry. Biochemistry is strongly recommended. Successful candidates must also show evidence of commitment to a career in the health professions and potential for admission to a professional school.

The Biomedical Sciences Faculty Admissions Committee uses the following information in making decisions concerning admission to the MS program:

Application, including an autobiographical statement and \$75 application fee

Official transcripts of all undergraduate and graduate work

Official score report from one of the following standardized tests: MCAT, DAT, OAT, GRE or PCAT

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.

All biomedical sciences graduate program students are accepted as degree candidates and may declare a degree concentration at any time after matriculation.

The admissions process of the degree program in biomedical sciences (MS) is not related in any way to any other degree program.

# ADMISSIONS POLICIES AND PROCEDURES

# GRADUATE PROGRAMS Department of Forensic Medicine and Pathology

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

The forensic medicine programs utilize a rolling admissions policy. Therefore, applications will be considered throughout the year as received until the desired enrollment has been achieved. Applications can be submitted online by visiting the Apply Now link at admissions.pcom.edu. The Faculty Committee on Admissions screens the applications, invites some applicants for an interview, evaluates the applicants and selects the new students. 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.

All applicants to the Graduate Programs in Forensic Medicine must have successfully completed 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.

Classes begin for each program as follows:

Pathway Summer term only

Master of Science in Forensic Medicine Fall term only

#### Pathway Program

The Pathway program is designed for those who are interested in forensic medicine and who possess a bachelor's degree in a forensic-related field (i.e., criminal justice, psychology, sociology or anthropology) but lack coursework in the core sciences (biology, chemistry, anatomy and physiology). This online program was devised to allow those without a strong science background to receive the necessary information to be successful in the Master of Science in Forensic Medicine. The Pathway program is a 10-week preparatory course in General Biology and Human Anatomy and Physiology, which lasts from June through August. Once the course is completed and successfully passed, 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. The Faculty Committee on Admissions for Graduate Programs in Forensic Medicine uses the following information in making decisions concerning admission to the Pathway program:

- 1. Application, including autobiographical statement and \$75 application fee
- 2. Official transcripts of all undergraduate and graduate work
- 3. One letter of recommendation
- 4. Current professional, state or federal license, certificates or registration documents, if applicable.

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

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

The degree program is a 40-credit program leading to a Master of Science in Forensic Medicine. It provides a solid foundation in the theory, concepts and principles of forensic medicine, the medico-legal and technical aspects of death scene investigations and clinical pathology skills. The emerging demands, roles and responsibilities of medico-legal investigators and clinical forensic specialists are also addressed. Please note that a strong health care and/or law enforcement background is recommended to apply directly to the MS degree program.

The Faculty Committee on Admissions for Graduate Programs in Forensic Medicine uses the following information in making decisions concerning admission to the master's program:

- 1. Application, including autobiographical statement and \$75 application fee
- 2. Official transcripts of all undergraduate and graduate work
- 3. One letter of recommendation
- 4. Current professional, state or federal license, certificates or registration documents, if applicable
- 5. Proof of successful completion of the following minimum coursework with a grade of *C* or better:

4 credits of General Biology (with lab)

- 4 credits of General Chemistry (with lab)
- 4 credits of Anatomy and Physiology (with lab)

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

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

# ADMISSIONS POLICIES REQUIRED FOR ALL PROGRAMS

#### Technical Standards

Each program has Technical Standards for Admissions which define the Physical Sensory and Cognitive Psychological requirements for enrollment. These standards are available at www.pcom.edu under requirements on the admissions pages

#### International Applicants/Non-U.S. Citizens

An international applicant is an applicant who is not a United States citizen or permanent resident (green card holder) of the United States.

#### Financial Responsibility

Once an international applicant is accepted and prior to matriculation in a program at either campus, he/she is required to place in PCOM's Escrow Account, tuition for the entire program prior to the start of the first year.

#### Licensing Requirements

It is the sole responsibility of the confirmed applicant to determine whether the degree received from PCOM and/or any licenses obtained in the United States will enable the applicant to practice a particular profession in his or her home country (or in any other country in which he/she desires to practice). Further, it is the sole responsibility of the confirmed applicant to determine that he/she will meet the eligibility requirements for any applicable U.S. state licensing exam. PCOM does not guarantee that any particular country will allow the practice of the profession for which a PCOM degree is received and United States licensing is obtained.

#### Employment Authorization for International Applicants

It is the responsibility of the international applicant to ensure that he/she maintains all applicable terms and conditions of his/her period of stay in the United States, understands any employment-related requirement of the relevant PCOM program, and meets any requirements for receiving U.S. employment authorization.

PCOM will assist individuals with Student Visa (F-1) status with applying for necessary authorization to complete work hours required by the curriculum in which the student is enrolled and/or desired post-completion employment authorization. PCOM assistance with employment authorization is limited to international applicants with Student Visa (F-1) status; all other international applicants must contact the Registrar to change to Student Visa (F-1) status, if applicable, or secure private legal counsel at the international applicant's own expense to assist with any immigration questions, concerns and/or filings.

#### Compliance with All Applicable Laws

Federal regulations, processes and requirements relevant to international applicants are subject to change at any time. PCOM requires that international students adhere to all applicable federal laws regarding their period of stay and/or ability to work in the United States. PCOM will also abide by all relevant federal laws, including future changes that may limit or restrict an individual's ability to remain in the United States.

PCOM urges applicants who have questions about their status or applicable immigration laws in the United States to seek legal counsel.

#### International Coursework

If an applicant has completed any coursework or a degree(s) from institutions outside of the United States, he/she must request an official course-by-course evaluation from World Education Services (www.wes.org) to be forwarded to the following address for review along with the application for admission:

Office of Admissions Philadelphia College of Osteopathic Medicine 4170 City Avenue Philadelphia, PA 19131

#### 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. The student has 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. The student has 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 Program Council officers, who are elected representatives from each class and graduate/professional degree program and the SGA Senate. The Philadelphia Campus Senate and the Georgia Campus Senate collaborate on issues of importance to the entire PCOM student body.

In addition to the SGA, 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. Services for DO students include specialty advisement and guidance on the residency application process. Students in the School of Pharmacy and PCOM's graduate programs participate in career planning seminars and have access to a variety of career planning resources provided through Nucleus, PCOM's intranet system.

# 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.

# Health Insurance

All PCOM students are required to have health insurance coverage.

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 Website (Nucleus) that enables students to post for roommates and available housing. Links to popular housing Websites 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 Website (under "Student Affairs," 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 and local government pertaining to civil rights and equal opportunity, including Title VII of the Civil Rights Act of 1964, Title IX of the 1972 Education Amendments and Section 504 of the Rehabilitation Act of 1973. The College's Policy Statements and Compliance Procedures on equal education and employment opportunity and sexual misconduct policies can be found on PCOM's Website.

PCOM prohibits discrimination on the basis of age, race, color, gender, gender identity and expression, national origin, ancestry, sexual orientation, religion, creed, disability, genetic information or 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 Chief Diversity Officer, who is the designated coordinator of PCOM's nondiscrimination program. Inquiries regarding compliance with the sex discrimination provisions of Title IX may be directed to the Title IX Coordinator and Chief Diversity Officer or also may 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.

Office of Diversity and Compliance Philadelphia College of Osteopathic Medicine Rowland Hall, Suite 415 4190 City Avenue Philadelphia, PA 19131 215-871-6185 or 215-871-6827 (fax)

#### Americans with Disabilities Act

PCOM is committed to meeting the needs for reasonable accommodation for physical and/or learning disabilities that are in alignment with the Americans with Disabilities Act (ADA) guidelines. Students are required to provide supporting documentation. 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 note on their Technical Standards form that they do not meet the technical requirements for the program. In response, the Office of Student Affairs will contact the student and provide all necessary information related to requesting and receiving accommodations. 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 accommodations, please contact the Office 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.

#### 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, Dean's list, degrees and awards received and names of undergraduate and/or graduate schools attended, internships and residencies.

#### Right to Withhold Disclosure

Under the provisions of the Family Educational Rights and Privacy Act, currently enrolled students may withhold disclosure of directory information. The Registrar's Office must receive written notification from a student indicating the information to be withheld. Should a student decide to inform the institution not to release certain information, any future requests for such information from non-institutional persons or organizations will be refused. Decisions about withholding any information should be made very carefully.

PCOM will honor each request to withhold any of the categories of information indicated by a student. However, the College cannot assume responsibility to contact a student for subsequent permission to release them should requests be received.

PCOM assumes that failure to request the withholding of directory information indicates approval for disclosure.

#### Right to Consent to the Disclosure of Personally Identifiable Information

All personally identifiable information related to a particular student other than directory information is considered confidential information and may not be released without the written consent of the student. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions:

- 1. Other schools to which a student is transferring
- 2. Specified officials for audit or evaluation purposes
- 3. Appropriate parties in connection with financial aid to a student
- 4. Organizations conducting certain studies for or on behalf of the school
- 5. Accrediting organizations
- 6. To comply with a judicial order or lawfully issued subpoena, PCOM's Registrar will make reasonable attempt to notify the student
- 7. Appropriate officials in cases of health and safety emergencies
- 8. State and local authorities, within a juvenile justice system, pursuant to specific state law.
- 9. School officials with legitimate educational interest (including but not limited to administrative, supervisory, academic, research or support staff)
- 10. National Board of Medical Examiners (NBOME) 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.

#### Right to Inspection and Review of Records

When the student matriculates, the Office of Admissions will forward the following

materials to the Registrar's Office.

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 (e.g., MCAT, GRE, MAT)
- Letters of acceptance and prepayment
- Completed Technical Standards form
- Previous applications and decision-related correspondence
- Criminal background check

All other materials in the applicant file are purged in accordance with the Family Educational Rights and Privacy Act of 1974, as amended.

A current or previously enrolled student has the right to inspect and review his or her education records maintained by the school. This right does not extend to applicants, those denied admission, or those admitted who do not enroll. A ten day written notice must be submitted to the Registrar's Office. The Registrar's Office will make arrangements for access and notify the student of the time and place where the records may be inspected.

Other data accrued during the student's tenure at the College including, but not limited to, transcripts, NBOME Board scores, academic status letters (e.g., probation, warning, dismissal), course related forms (e.g., 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, NBOME Board scores, 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 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.

Statistics on Placement in Graduate Medical Education and COMLEX-USA Level 3 Graduate residency/internship match rates and COMLEX-USA Level 3 performance statistics for PCOM students are reported on the pcom.edu website under "program statistics" at http://www.pcom.edu/prog\_stats/prograstats.html

# Statement on Student Academic Freedom

Academic freedom is essential to the integrity of intellectual inquiry and scholarly criticism, to the dissemination of knowledge and to the search for truth and wisdom.

PCOM affirms the vital role of diverse perspectives in helping students to develop their own knowledge and their ability to evaluate knowledge claims critically. The administration, faculty, staff and students share responsibility for fostering a climate that is favorable to the free exchange of ideas and the examination of conflicting ideas and interpretations when expressed professionally. Students have the right to a safe classroom environment in which they can explore controversial ideas in an atmosphere characterized by openness, tolerance and civility, and where they will be graded only on the intellectual merits of their work.

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

PCOM is committed to meeting and exceeding the standards for accreditation for the College and all degree programs, including the standards for colleges of osteopathic medicine as described by the American Osteopathic Association Commission on Osteopathic College Accreditation, the standards for schools of pharmacy as described by the Accreditation Council for Pharmacy Education, the standards of the American Psychological Association and the National Association of School Psychologists for psychology programs and the accreditation standards of the Accreditation Review Commission for Education for the Physician Assistant. Copies of the respective standards are available upon request from the Office of the Provost. The Academic Program Handbook of each program contains contact information and/or the procedure of each accrediting body for filing of complaints regarding compliance with accreditation standards, where applicable.Contact information for the Middle States Commission on Higher Education may be found under Accreditation in this catalog.

#### 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 provost requires 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 provided in the PCOM General Student Handbook.

#### Professional Codes of Ethics

The codes of ethics of various professional associations have been adopted, as appropriate, as guidelines for PCOM professional degree and graduate students. The American Osteopathic Association, the American Academy of Physician Assistants, the American Psychological Association, the National Association of School Psychologists, the American Pharmaceutical Association, and the American Association of Colleges of Pharmacy have formulated their codes of ethics to guide members in their professional lives, and the standards are designed to address the health professional's ethical and professional responsibilities to patients, society, others involved in health care and self. In addition, some academic programs have developed their own codes of ethics and student conduct. The codes of ethics are reproduced in the student handbooks and/or orientation materials of the respective academic programs at both Philadelphia and 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 a passing grade. There are a few courses in the first and second year that are Pass/Fail courses. 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>	Quality Points	<u>Percentage</u>
А	4.0	90 - 100
В	3.0	80 – less than 90
С	2.0	70 – less than 80
D	1.0	65 – less than 70
F	0.0	less than 65
Р		Pass (does not affect the GPA)

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.

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 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> A	Quality Points 4.00	Percentag	<b>ge</b> Superior level of competency
A-	3.67	90 – 94	Superior level of competency
B+	3.33	85 - 89	
В	3.00	80 - 84;	Satisfactory level of competency
B-	2.67	77 – 79	, i j
C+	2.33	74 – 76;	Marginal level of competency
С	2.00	70 – 73;	Marginal level of competency
F	0.00	0 – 69;	Failure to demonstrate a marginal level of competency; F does not count towards the total number required for the program.
IP	Incomplete pending is a grade granted only in Psychology Research courses when the instructor and program director deem additional time needed to complete the course. IP must be completed within the next term in the time period designated by the instructor and program director.		
HP	Superior level of competency in practicum seminar		
Р	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		

#### Grades Common to All Programs:

- 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. Failure to complete the assignment within six weeks will result in the Incomplete being changed to a grade of F The only exception is in Psychology where it is required that Independent Study courses and Assessment I or II must be completed by the end of late registration in order to be eligible for enrollment in the next term's course sequence.
- W Withdrawal before midpoint of the term of a course; once the midpoint of a term has been reached, a student 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, WF, 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.

Students enrolled in the Doctor of Osteopathic Medicine, the Doctor of Pharmacy and the Physician Assistant programs are not permitted to drop one course, but are required to drop all coursework in that term. Because of the sequential nature of these programs, students requesting to be dropped from one term may be required to take a leave of absence until the following year. In these programs, consultation and approval from the program dean or program director is required.

# Withdrawal From Courses After Drop-Add Period

Withdrawals occur after the first week of the term.

While students in other graduate programs may be permitted to withdraw from a course, it should be done with the consultation of their program director or dean. Withdrawals may change the sequence of courses to be taken.

Students approved to take a withdrawal from a course up to the midpoint of a course will earn a grade notation of Withdraw. After 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 their program director or dean. The latter option will be reserved for extreme circumstances only. Course withdrawals approved after the midpoint of the course will carry a grade notation of WP if withdrawing when passing, or a grade notation of WF if withdrawing when failing.

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

A course audit does not provide the student with any course credit nor can it be used toward degree requirements. A course audit is noted on the transcript with a grade of AU and does not calculate into the GPA. When auditing a course the student is required to actively participate in labs, group assignments and to take examinations.

For a student to audit a course, permission must be received from the dean or the program director at the beginning of the term and submitted to the Registrar's Office. Audited coursework will not be eligible for federal financial aid.

# 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 prior institution, 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 tuition for the duration of the program. These funds will be placed in a PCOM escrow account. International students must be enrolled full time each term and continue to make academic progress.

#### Transfer Credit

#### Doctor of Osteopathic Medicine

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.

#### Doctor of Pharmacy

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

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 Programs**

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

#### Attendance Policy

Students are strongly recommended 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 must be documented and reported to the Chief Student Affairs officer in Philadelphia or the Director of the Center for Student Affairs in Georgia 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 Chief Student Affairs officer in Philadelphia and the Director of the Center for Student Affairs in Georgia, Clinical education, or the office of the specific academic program.

#### Academic Progress Evaluation

Student scholastic achievement is reviewed on an ongoing basis by each program's Student Progress Evaluation Committee (SPEC). The SPEC Committees make recommendations on student academic standing to the Student Academic Progress and Policy Committee (SAPPC).

#### 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.

Warning: A departmental written warning may be issued to any student who has incurred a course, clerkship or preceptorship failure(s) subject to a validation or remediation. Issuance of a letter of academic warning does not necessarily result in loss of good academic standing but is intended to alert the student that academic deficiencies have been recorded and must be remediated to meet promotion requirements.

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 Student Academic Progress and Policy Committee, whereby a student may be dismissed from the academic program of the College.

# PROGRESSION POLICIES BY PROGRAM

# Doctor of Osteopathic Medicine

In the Doctor of Östeopathic Medicine program the extent of a student's academic deficiency considers the accumulation of academic standing units. Assignment of academic standing units to courses or clerkships not successfully completed is based on course credits or number of clerkship weeks using the following formula:

- Courses worth less than 1 credit hour to 3 credit hours = .25 Academic Units
- Courses worth more than 3 credit hours to 8 credit hours = .50 Academic Units
- Courses worth more than 8 credit hours = 1.00 Academic Units
- Clerkships 2 weeks in length = .50 Academic Units
- Clerkships 4 weeks in length = 1.00 Academic Units

Students' performance is reviewed at the end of each term. Students with unsatisfactory academic achievement will be counseled regarding their performance.

A student with a failure in one academic standing unit will be recommended by the Student Academic Progress and Policy Committee to the Dean for promotion from one class to the next when the student has removed the deficiency.

Students who have accumulated one or more academic standing units of course failures may not be eligible for validation examination and may not be eligible for advancement to the next year of study.

Students with one or more academic standing units of course failures may be dismissed from the academic program of the College or required to repeat a year of study, at the discretion of the Student Academic Progress and Policy Committee. If a student is afforded the opportunity to repeat the year of study, they will do so on probation and will not be allowed to appeal should another failure occur. A review of a student's complete academic performance may be considered in determination of dismissal.

Students who fail a clerkship and have had prior academic failures in their didactic years may be liable for dismissal. Students who have not had prior failures in their didactic years and receive more than one failure in a clerkship may be liable for dismissal.

When considering a student for dismissal from the DO program all performances can be reviewed.

# Doctor of Pharmacy

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 Student Policy and Progress Committee. 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 that 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 that 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 coursework 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

The Academic Performance and Standards Committee may recommend dismissal from the PCOM School of Pharmacy following review of any student that comes before the committee and will automatically recommend student dismissal from the School of Pharmacy under any one of the following conditions:

- Failure to maintain a current, valid State of Georgia Pharmacy Intern License
- Receiving three grades less than C for all courses taken at PCOM School of Pharmacy
- A grade of D, F, NP or WF is considered to be a grade less than C
- Failure to successfully remediate a course on the first attempt
- Failure to attain a cumulative GPA greater than or equal to 2.0 at the end of a repeated professional year

A student dismissed from the PCOM School of Pharmacy may appeal this decision according to the policies set forth in the PCOM General Student Handbook under the section Appealing an Academic Dismissal Decision.

# Academic Probation

Probation is an action taken in the interest of the student. A student who is placed on probation should carefully evaluate his/her chance of success in earning a degree in Pharmacy from PCOM School of Pharmacy if his/her current strategy continues. At a minimum, a student should arrange to substantially increase the amount of time and effort devoted to academic preparedness. Students are immediately placed on academic probation under any one of the following conditions:

- Term or cumulative GPA less than 2.0 at the end of any term
- Receive a course grade of F, NP or WF
- Upon recommendation by the Academic Progression and Standards Committee

The probationary period is the academic term immediately following, unless the Academic Performance and Standards Committee specifies a longer probationary period. Removal from probation only occurs if the student has, at the end of the probationary period, attained a term and cumulative GPA greater than 2.0, received a grade of P in all P/NP courses during the probation period, and successfully remediated all courses with a grade of F or NP and met any other conditions imposed by the Academic Performance and Standards Committee.

All students on probation are required to make an appointment with the Associate Dean for Academics and Assessment during the first week of each probationary term to develop

a plan to help improve their academic performance. Students on probation are not permitted to serve as an officer of any student organization affiliated with PCOM or PCOM School of Pharmacy or attend any non-mandatory PCOM School of Pharmacy-sponsored activity.

# 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 his or her 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 or (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 or (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 of 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 his or her 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 or (2) repeat of the professional year.

Successful removal from academic probation is achieved when the semester and cumulative GPA is greater than 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 is greater than 2.0.

# Review by the Academic Performance and Standards Committee

A student is reviewed by the Academic Performance and Standards Committee under any of the following circumstances:

- Failure to maintain a current, valid State of Georgia Pharmacy Intern License
- Placed on academic probation
- Remain on academic probation for two or more consecutive terms
- Receive a course grade of D while on probation
- Receive a course grade of F, NP or WF
- Receive two course grades of D
- Cumulative GPA less than 2.0 at the end of the third professional year

The Academic Performance and Standards Committee will afford the student an opportunity to speak to the committee during its deliberations. The committee forwards its recommendation, along with a rationale for its decision, to the PCOM Academic Policy and Promotion Committee for review. The PCOM Academic Policy and Promotion Committee then forwards the recommendation to the Dean of the PCOM School of Pharmacy, who may impose sanctions including academic probation, repeat of a single course, courses or an entire professional year or dismissal from the PCOM School of Pharmacy.

# Doctor of Psychology

In the doctoral programs, a grade of F (failure) or WF (withdrawal while failing), or 3 grades of C or U (unsatisfactory) will make the student liable for dismissal from the program. 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. There are several courses that require the student to achieve a grade of B. The student may be required to retake the course. This information regarding which course(s) require(s) a grade of B is annotated under the course description in the Program and Course Description section of the catalog.

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

# Graduate Programs (Master of Science)

In the graduate programs, a grade of F (failure), U (unsatisfactory) or WF (withdrawal while failing) 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.

# 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 Academic Appeal Committee requests other than an appeal of a permanent dismissal action. Any student appealing a dismissal will be entitled to a hearing before the

Academic Appeal Committee. 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.

A student will be permitted only one appeal.

### Continuation in Lieu of Appeal

There may be certain circumstances that a student who was eligible for dismissal is afforded the privilege of repeating the academic year without requiring a formal Appeal. In such cases, the student will lose their right to appeal should they be unsuccessful in their coursework that year and be dismissed,

# 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.

When considering a leave of absence a student should consult with the Chief Student Affairs Officer at the Philadelphia Campus or the Director of the Center for Student Affairs at the Georgia Campus, and where applicable the student's Program Director to consider how a leave would affect his or her overall progress in the academic program of the College. Additional consultation with the Financial Aid Office is suggested for those students with financial aid to determine any financial ramifications.

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.

To receive consideration for a leave of absence, a student must submit to the appropriate Dean or Vice President of Graduate Programs a written request explaining the time requested and the basis for the leave of absence. Upon final consultation with the appropriate Dean or Vice President of Graduate Programs regarding the circumstances, a decision will be rendered. All applications for leave of absence are considered on their individual merits and approved only for extraordinary reasons.

Final approval of leaves of absences is given by the Dean in the Doctor of Osteopathic Medicine and Pharmacy programs and the Vice President of Graduate Programs for all graduate programs.

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 replacing the failure; however, this will not remove the previous W, WP or F for that course from the transcript.

There are circumstances wherein the leave of absence is initiated by PCOM. These are financial leave of absence and academic leave of absence.

A financial leave of absence is initiated by the Bursar's Office when a student does not meet his/her financial obligations to PCOM in a term. The Bursar's Office will advise the Registrar's Office to remove the student from subsequent term enrollments. The student is notified by the Registrar's Office when this action has occurred. The student will not be permitted to return until his/her financial obligations are met. If a financial leave is implemented, the student still must adhere to completion of his/her program in the timeframe designated.

An academic leave of absence is initiated by the Registrar's Office in one of two ways:

- 1. Student has been advised of dismissal and is granted the privilege of returning the following year.
- 2. In certain graduate programs there may be situations wherein a student is unable to register due to the fact that there are no courses offered in that term for which to register, but the student is still actively pursuing the degree. In this rare situation, the Registrar can approve a one term only leave.

# Implications of a Leave of Absence

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. Therefore, 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 premiums, which is generally monthly during a leave.

#### Return from Leave

Before the conclusion of the leave of absence, the student must notify the Provost 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 Provost 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 Provost.

Prior to the return, all financial obligations must be satisfied with the Bursar as stipulated in the Tuition and Fees section of this catalog before petitioning for re-admission. 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.

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.

# 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 program director or the Dean 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 toward 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, warning, probation, suspension and dismissal.

Warning: A warning is 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. Warnings are reported to the Provost, Dean 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 Committee on Professional Conduct. 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: 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: Dismissal represents permanent separation from the College. Dismissal may be invoked by the Student Professional Conduct Committee 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 Student Professional Conduct Committee without the consent of the affected student. However, the Committee on Professional Conduct 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 2016-2017 academic years. Tuition is payable 20 business days before the start of each term. Tuition and a comprehensive fee are subject to change at any time at the discretion of the Board of Trustees. The comprehensive fee is neither returnable nor transferable. Each DO, Pharmacy and PA student is charged an annual comprehensive fee of \$750. Each graduate student is charged a per term comprehensive fee as follows: Summer \$188, Fall 188, Winter \$187, Spring \$187.

#### Doctor of Osteopathic Medicine (DO)

Tuition for the 2016-2017 academic year is \$48,024. Students are charged the comprehensive fee as described above.

Accepted applicants are asked to send a \$250 non-refundable tuition prepayment according to the schedule listed in the Admissions Policies and Procedures section of this catalog. An additional deposit of \$1,500 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 2016-2017 academic year is \$36,528. 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 (PsyD)

Tuition for the 2016-2017 academic year is \$1,158 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.

#### Doctoral Program in School Psychology (PsyD)

Tuition for the 2016-2017 academic year is \$1,084 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.

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

Tuition for the 2016-2017 academic year is \$908 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 Mental Health Counseling (MS), School Psychology and CAGS

Tuition for the 2016-2017 academic year is \$840 per credit for all masters 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.

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

Tuition for the 2016-2017 academic year is \$805 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.

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

Tuition for the 2016-2017 academic year is \$45,128 for the first year and \$41,505 for the second year divided over five terms. 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 Public Health Management Administration

Tuition for the 2016-2017 academic year is \$754. per credit. Students are charged the comprehensive fee as described above.

#### Master's Degree Program Aging and Long Term Care Administration

Tuition for the 2016-2017 academic year is \$805. per credit. Students are charged the comprehensive fee as described above.

#### Master's Degree Program in Biomedical Sciences (MS)

Tuition for the 2016-2017 academic year is \$883 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 Forensic Medicine (MS) and Pathway Program

Tuition for the 2016-2017 academic year is \$842 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 comprehensive fee 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 fee 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.

# FINANCIAL AID

The Office of Financial Aid strives to assist students with financial aid options and promote financial literacy while maintaining compliance with all federal, state and institutional policies.

#### Determining Financial Need

With the exception of Federal Stafford unsubsidized loans and Federal Graduate PLUS loans, federal financial aid is awarded on the basis of financial need. When the student's Free Application for Federal Student Aid (FAFSA) is processed, a formula is applied to the information that the student provided to calculate the student's Expected Family Contribution (EFC). EFC is the amount that the federal government has determined that the student can contribute towards the cost of his/her education. The formula is established by law and is used to measure the student's financial strength based on his/her income and assets.

The student's EFC is used in the following equation to determine the student's financial need:

Financial Need = Cost of Attendance - Expected Family Contribution

#### Cost of Attendance

A student's Cost of Attendance, or financial aid budget, is the sum of the following:

- Tuition
- Comprehensive School Fee
- Class dues (not applicable to all programs)
- Books and supplies
- Instruments and equipment (not applicable to all programs)
- Medical exam costs (not applicable to all programs)
- Health insurance
- Room/rent
- Utilities
- Food/groceries
- Transportation
- Personal
- Loan fees

#### THE APPLICATION PROCESS

#### FAFSA

To apply for financial assistance at PCOM for each academic year, students must first complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov. This online form is the backbone of the financial aid process and is needed to be awarded federal student loans, federal work study, and certain PCOM and external scholarships.

Social Security numbers are required for all financial aid processing. Eligibility In order to be considered for the majority of PCOM's financial aid resources and federal student loans, the student must complete the FAFSA. The basic eligibility criteria for completing the FAFSA are:

- 1. The student must be a U.S. citizen or eligible noncitizen.
- 2. The student must be enrolled or accepted for enrollment as a regular student in an eligible degree or certificate program.
- 3. The student must be enrolled as at least a half-time student (usually at least 3 credits) each term.
- 4. The student must maintain satisfactory academic progress.

# PCOM Scholarship Application

Students must complete the PCOM Scholarship Application as part of their Nucleus Financial Aid Checklist in order to be considered for all PCOM endowed scholarship funds that have unique criteria. PCOM endowed scholarships are selected by the PCOM Scholarship Committee. Also, by the student's completing the PCOM Scholarship Application, the PCOM Financial Aid Office will specifically notify students of certain external agency scholarships for which they may apply.

# Financial Aid Checklist

Students will find their PCOM Financial Aid Checklist within Nucleus. Students must use the Financial Aid Checklist to complete outstanding requirements, accept financial aid awards, and view their exact Cost of Attendance. New students will be given access to Nucleus from the PCOM Student Affairs Office after they submit their first tuition prepayment or deposit.

# RESOURCES – FEDERAL STUDENT LOANS

# Federal Direct Stafford Unsubsidized Loan

The annual amount awarded varies by a student's program and year. The aggregate lifetime borrowing limit varies by program. There is no credit check required for applying for this loan. This loan has a fixed interest rate set by the federal government. Please note that interest accrues while the student is enrolled in school and during other periods of nonpayment. The student may choose to make interest payments or allow interest to accrue while attending school. Also, interest is capitalized upon repayment, meaning that the interest accrued is added to the principal amount of the loan.

#### Federal Direct Graduate PLUS Loan

The annual amount awarded can be up to a student's Cost of Attendance minus other financial aid (loans, scholarships and federal work study) awarded. The Graduate PLUS loan has no aggregate lifetime borrowing limit. A credit check is required during the application process of this loan on www.studentloans.gov. Graduate PLUS loan credit checks will expire after approximately 180 days. If the student does not pass the initial credit check, he or she can appeal the decision or use a credit-worthy cosigner. This loan has a fixed interest rate set by the federal government, and interest accrues while the student is enrolled in school and during other periods of nonpayment. The student may pay interest or allow it to accrue while attending school. Please note that interest is capitalized upon repayment, meaning that the interest accrued is added to the principal amount of the loan.

# Resources – Non-Federal Private Student Loans

Students are free to research and apply for alternative, non-federal graduate and medical student loans from private banks and credit unions. Private student loan interest rates,

interest accrual, annual amounts, aggregate amounts, and various other loan policies vary among private lenders. It is important for students to discuss all loan details and conditions with the lender.

The annual amount can be awarded up to the student's Cost of Attendance minus other financial aid (loans, scholarships and federal work study) awarded. The aggregate lifetime borrowing limit varies by lender. Most lenders offer fixed and variable interest rates. A credit check is required for applying for private student loans, and having a cosigner can dramatically improve the interest rate.

Students have the right to choose their lenders and PCOM will process any Private student loan.

#### Resources – PCOM Alumni Association Loan

The PCOM Alumni Association Loan is a low-interest loan awarded to second year and higher students by the PCOM Financial Aid Office on behalf of the PCOM Alumni Association. Students must be in good academic standing and demonstrate financial need.

The annual amount awarded can be up to \$3,000 and the aggregate lifetime borrowing limit is \$6,000. This loan has a low fixed interest rate set by PCOM. There is no credit check required and repayment of this loan is to PCOM. Students will repay these loan funds directly back to the institution by making payments to ECSI, a loan servicing company. Also, repayment of this loan can be deferred during internship and residency.

#### RESOURCES – HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA) LOANS

#### Loan for Disadvantaged Students (LDS)

The LDS is sponsored by the U.S. Department of Health and Human Services (HHS) and is administered by the PCOM Financial Aid Office. This loan is available to fourth year Doctor of Osteopathic Medicine (DO) students who demonstrate exceptional financial need in that the income of the parent(s), student's spouse and student is less than or equal to 200% of the HHS Poverty Guideline. In the event that there are not enough eligible fourth year medical students, then awards are made to third year students who meet the same criteria.

The annual amount can be awarded up to the student's Cost of Attendance minus other financial aid (loans, scholarships and federal work study) awarded. The amounts awarded to students will vary by funding available. This loan has a fixed interest rate set by the federal government and interest does not accrue while the student is enrolled in school and during other periods of nonpayment. There is no credit check required for applying for this loan. The repayment of this loan is to PCOM. Students will repay these loan funds directly back to the institution by making payments to ECSI, a loan servicing company.

#### Primary Care Loan (PCL)

The PCL is sponsored by the HHS and administered by the PCOM Financial Aid Office. The PCL will be awarded to fourth year DO students who have successfully completed both the COMLEX 1 and COMLEX 2 board exams. The student also must have matched in a primary care residency program. Eligible students will be identified in mid-March after residency match has occurred. Students are required to meet with a financial aid counselor who will fully explain the advantages and possible disadvantages to this loan. A letter will be signed by the student to ensure that he/she understands the disadvantages.

The amount of PCL awarded will be based on the amount of federal student loans that the student borrowed in his/her fourth year of medical school. The PCL is a need-based loan and students must submit parental income information on the FAFSA in order to demonstrate financial need. Independent students do not have to provide parental financial information, but must be at least 24 years of age and provide documentation showing they have been independent for a minimum of three years.

The PCL has a low fixed interest rate of 5.0% determined by the federal government. Interest does not accrue while students are enrolled in school and during other periods of nonpayment. There is no credit check required for applying for this loan. Students will repay these loan funds directly back to the institution by making payments to ECSI (http://borrower.ecsi.net), PCOM's third party loan servicing company.

More details on the PCL can be found at: http://www.hrsa.gov/loanscholarships/loans/primarycare.html

# Super Primary Care Loan (Super PCL)

Depending on the availability of funding, Primary Care Loan recipients may also be eligible for additional PCL funds to repay prior student loans in previous years of medical school at PCOM. Terms, conditions, and financial need criteria of the Super PCL are the same as for the standard PCL. Award amounts vary upon the availability of funding.

# RESOURCES – FEDERAL WORK STUDY (FWS)

The Federal Work Study (FWS) program provides funds for part-time employment to help students to finance the costs of postsecondary education.

# FWS - Eligibility

To be eligible for FWS, a student must meet the following criteria:

- Completed the FAFSA for the appropriate academic year.
- Submitted all financial aid requirements.
- Demonstrated financial need.
- Be enrolled at least halftime (usually at least three credits, but there are exceptions).
- Be matriculated in a degree seeking program.

# Award Amount, Pay Rate and Hours

Depending on a student's eligibility, the usual FWS award is \$5,400 for the academic year. Students do not need to reapply for FWS each term. Most positions pay \$15 per hour. This works out to be about 10 hours per week over 3 terms. Students should not work more than 20 hours per week with the exception of summer work where a student can potentially work over the 20 hours. Students are responsible for managing their FWS hours and may not work in excess of their FWS award as part of their financial aid package.

# Jobs

Jobs range from typical library and office work, to assisting in labs and participating in research. Visit the Job Listing Summary Sheet available on the PCOM Financial Aid website or within Nucleus to view potential FWS job positions on both the PCOM Pennsylvania and GA-PCOM Georgia campuses.

#### Applying for a FWS Position

It is the student's responsibility to seek out and apply for a FWS job by contacting supervisors/departments listed on the FWS Job Listing Summary Sheet. After a student has been hired for a work study position, the student or supervisor will notify the Financial Aid Office so that the office can add Federal Work Study to the student's financial aid award. The Financial Aid Office will then send a Federal Work Study Award Form to the student via e-mail. The student and job supervisor will complete the FWS Award Form and return it to their appropriate Financial Aid Office. If a student is new to the FWS program, the student may also need to complete additional forms.

Once all the forms are received and reviewed by the Financial Aid Office, the student and the job supervisor will receive a Federal Work Study Authorization e-mail. This e-mail will describe the amount of the work study award, the number of hours that the student may work, and the name of the supervisor and timekeeper. A student may not begin to work until this authorization e-mail has been received.

To view additional details on eligibility, terms and applying for Federal Work Study, please go to the Federal Work Study website, located in the Financial Aid section of the PCOM website at www.pcom.edu.

#### RESOURCES – SCHOLARSHIPS

#### PCOM Academic Merit Scholarships

The PCOM Office of Admissions offers merit scholarships to newly admitted students. If the student is awarded an admissions merit scholarship, the student will be notified directly by the PCOM Office of Admissions. Students are not required to file a FAFSA to be considered for these merit scholarships and there is no application. PCOM merit scholarships are not renewable after the first year, but students will be considered for other need-based funding as long as they meet the eligibility criteria.

#### PCOM Financial Need Scholarships

These scholarships are awarded by the PCOM Financial Aid Office to students based on financial need, aggregate student loans borrowed, and funding available.

Students must complete the FAFSA if they wish to be considered for PCOM's financial need scholarships. Students are REQUIRED to post their parent information on the FAFSA if they are age 26 and younger as of December 31 prior to the year they enroll. If the student is age 27 and older as of January 1 of the year they enroll, parent information is NOT required on the FAFSA to be considered for PCOM's financial need scholarships.

#### PCOM Endowed Scholarships

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

Students must complete the PCOM Scholarship Application as part of the Nucleus Financial Aid Checklist in order to be considered for all PCOM endowed scholarship funds that have unique criteria. Please view the Financial Aid Handbook on the PCOM Financial Aid website for a list of endowed scholarships.

#### External Scholarships

Numerous private, city and state agencies sponsor scholarship and loan programs for graduate and medical students. The PCOM Financial Aid Office is periodically notified of external agency scholarships.

By the student's completing the PCOM Scholarship Application as part of the Nucleus Financial Aid Checklist, the PCOM Financial Aid Office will specifically notify students of those external agency scholarships that they may apply for. Please view the Financial Aid Handbook on the PCOM Financial Aid website for a list of certain external scholarships.

# PCOM Yellow Ribbon Grants

PCOM participates in the Veterans Administration (VA) Yellow Ribbon program. Students who are eligible to receive VA benefits under the Post-9/11 GI bill may be considered to receive additional funds from PCOM under this program. Eligible students should submit their certification of eligibility to the PCOM Office of the Registrar.

As there are a limited number of Yellow Ribbon scholarships, the awarding will be based on when the certification of eligibility is received. A maximum of 10 awards will be made to graduate students, and a maximum of 10 awards will be made to medical students. Tuition and fees paid under the Post-9/11 is capped at \$17,500 or the appropriately reduced amount based on the student's eligibility percentage for the academic year.

For further information regarding Post-9/11 or other chapters, contact the PCOM Registrar's Office.

#### National Health Service Corps

This is a competitive federal program that awards service-obligated scholarships to students pursuing primary health care training. The scholarship provides payment of tuition, 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.

#### Health Professions Scholarship Program

The United States Army, Navy and Air Force offer prospective military physicians, physician assistants, clinical psychologists and pharmacists a paid medical education in exchange for service as a commissioned medical department officer. U.S. citizens are eligible based on academic performance, recommendations and physical requirements. The Health Professions Scholarship Program (HPSP) provides funding for tuition and fees, books and instruments, and a monthly stipend. In return for the scholarship, recipients are obligated to give one year of service for each year of support (minimum two years of service). Recipients will be required to spend 45 days on active duty each year while in school (usually on weekends).

#### Satisfactory Academic Progress (SAP) for Financial Aid

The United States Department of Education requires every postsecondary institution receiving Title IV federal funds to have an academic progress policy that is used to determine eligibility for and continued receipt of federal funds. Although this policy must apply to all students whether or not they are receiving financial aid, the receipt of financial aid is a privilege that creates both rights and obligations for the student. The Satisfactory Academic Progress (SAP) policy has three components:

- 1. The student must maintain a certain grade point average or a comparative qualitative measurement against a norm.
- 2. The student must complete a certain percentage of all coursework attempted.
- 3. The student has a maximum timeframe to complete the program.

Title IV federal funds affected by this policy at PCOM include Federal Work Study program, Federal Perkins Loans, Federal Direct Graduate PLUS Loans and Federal Direct Stafford Loans. Although not required, all institutional funds are also governed by the SAP policy.

A review of SAP will be conducted at the end of every Spring term regardless of when a student enrolls. Failure to meet any component of SAP at the end of the Spring term will result in the loss of eligibility for federal and PCOM financial aid for the next academic year. The Financial Aid Office will notify the student if the student has failed to meet the SAP standards of Satisfactory Academic Progress for Financial Aid and has lost eligibility for financial aid. If financial aid has already been awarded for the subsequent academic year, the offer of aid will be rescinded.

A student may appeal the loss of eligibility of financial aid and seek to be placed on Financial Aid Academic Progress Probation for one term. This appeal must be based upon on either the death of a relative, a serious personal illness/injury or other extenuating circumstance. The student must be able to demonstrate that the illness/injury or extenuating circumstance had a direct impact on the student's academic performance. To do this, the student must work with the appropriate Academic Program advisor and/or Student Progress Evaluation Committee to develop an appropriate Academic Action Plan.

If the student is granted Financial Aid Academic Progress Probation, the student will regain eligibility for financial aid for one term. At the end of the term, the student's academic record will be reviewed. If the student is now meeting the terms of the Standards of Academic Progress, the student will regain eligibility for financial aid for subsequent terms. If the student has still not met the terms of the Standards of Academic Progress but has fulfilled the terms of the Financial Aid Academic Progress Probation, then the student's Financial Aid Academic Progress Probation will be renewed for an additional term and the student will be awarded aid for that term. If the student has not fulfilled the terms of the Financial Aid Academic Progress Probation, then the student will lose eligibility for financial aid.

Students who are dismissed or withdrawn from the school are not deemed to be making SAP and are not eligible to receive financial aid. The policy on SAP will be disseminated to all newly matriculated students. All students will be notified yearly of the SAP policy, which will be published yearly in the Financial Aid Handbook.

Doctoral students must achieve a minimum cumulative GPA of 3.0. Graduate students must achieve a minimum cumulative GPA of 3.0. Graduate Certificate students must achieve a minimum cumulative GPA of 2.0. Pharmacy students must achieve a minimum cumulative GPA of 2.0.

Doctor of Osteopathic students must:

- Achieve a passing grade on all coursework, validations, exams and clinical clerkships.
- Pass COMLEX I by the end of year 3.
- Pass COMLEX II (both parts) by the end of year 4.

Students must complete the appropriate percentage of all courses attempted to maintain a good academic standing. The completion percentage is calculated by dividing total hours earned by total hours attempted.

If a student changes degree programs, then the SAP status will be based on the academic record of the new program.

It is also important to understand how specific grades and/or course types count toward the completion ratio. The following grades count as attempted but not completed courses:

- Incomplete
- No Grade Reported
- Withdraw
- Failure
- Unsatisfactory

All students at PCOM are required to maintain a 67% completion of coursework. Transfer credits will count towards a student's attempted and completed credit hours.

Students in the Doctor of Osteopathic and Psychology programs have seven years to complete the program from initial matriculation. Pharmacy students have six years from initial matriculation, and graduate students have five years from initial matriculation to complete the program. Any term in which a student is enrolled counts towards the maximum timeframe regardless of whether or not the student receives federal financial aid.

#### **Refund Policy**

When a student's loan or scholarship funding is received by the PCOM Bursar's Office, any balance due to PCOM will be deducted from the amount of the funds. Any financial aid funding left over after paying the student's balance will then go to the student as a "refund check" via postal mail. All refunds are issued by the PCOM Bursar's Office.

#### Direct Deposit

Direct deposits of student refund checks are available by the student's completing an authorization form at the PCOM Bursar's Office. After refund money is processed by the PCOM Bursar's Office, it usually takes 1-5 business days for a student's bank to process the refund money and place it in the student's bank account.

#### Pending Loan Advance (PLA) Requests

A student is eligible for a PLA up to 15 days prior to the disbursement of the student's financial aid for the upcoming term or the start date of his or her first course in a term provided he or she has a term enrollment status of at least half time. The student needs to have completed all requirements to accept the financial aid. All counselors can complete the PLA form with a student, but final approval is required by an Associate Director or Director of Financial Aid.

The amount of eligibility will be based on the student submitting the Pending Loan Advance Form. The counselor will speak with the student in person or over the phone to inform the student about any possible future deficit of funds for the upcoming quarter and, if necessary, recommend that the student make spending adjustments to eliminate the deficit. The student will be asked why he or she needs a PLA on the Pending Loan Advance Form. If the stated reason is an expense that could not otherwise be included in the student's cost of attendance or approvable as a budget appeal, the counselor will deny the request.

The maximum amount available for a loan advance to a particular student will be limited to the lesser of the following:

- \$2,000 for both graduate and professional students.
- Amount requested.
- Amount approved by counselor after a review of budget and aid for upcoming term.

The student is limited to one PLA per academic year. If a student has an emergency situation that is unavoidable, the student can meet with the Director to discuss a possible second PLA for the academic year. If approved, the Director will make it very clear that no additional PLA will be approved for the remaining academic school year.

#### Tuition Refund Policy

Refunds are determined based on the proration of tuition and percentage of program completed at withdrawal, up to 50% of the program. 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 for 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:

Withdrawal Date	Term Charge	<u>% of Credit</u>
During first week of class (up to 5% of instructional time)	0% term charge	100% credit
During second week of class (more than 5% but no more than 10% of instructional time)	10% term charge	90% credit
During third and fourth weeks of class (more than 10% but no more than 25% of instructional time)	25% term charge	75% credit
During fifth through seventh weeks of class (more than 25% but no more than 50% of instructional time)	5 50% term charge	50% credit
Withdrawal after seventh week of class (more than 50% of instructional time)	100% term charge	0% credit

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.

A student's total Cost of Attendance is based on certain enrollment. When a student drops courses, the PCOM Financial Aid Office will likely reduce the student's total Cost of Attendance. Often this results in no additional allocation of refund money to the student.

For additional information contact the PCOM Bursar's Office

#### Return of Title IV Funds When Withdrawing From All Courses

The PCOM Financial Aid Office is responsible for calculating federal financial aid eligibility for students who discontinue enrollment during the term. Upon notification from the PCOM Registrar's Office that a student has withdrawn from or dropped all classes, was dismissed, or is approved for a leave of absence, the PCOM Financial Aid Office is required to calculate the percentage of the term completed if the student received or was eligible for Title IV federal student aid (Stafford, PLUS, and Perkins loans).

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

- 1. The 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:

- 1. Federal Direct Stafford Unsubsidized Loans
- 2. Federal Direct Graduate PLUS Loans
- 3. Federal Perkins 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.

## 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. The GA-PCOM campus occupies 19 acres in Suwanee, Gwinnett County, Georgia. State-of-the-art renovations to the 149,885-square-foot building were completed in August 2005.

#### Student Computer Services

The PCOM network can be accessed via student-owned notebook computers from a variety of study areas across the campuses 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 and throughout the Georgia Campus. 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 is supported by Gmail and enables students to send and receive electronic mail related to all PCOM activity. PCOM e-mail has its own set of Gmail 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.

In addition to common application programs such as Microsoft Office Suite, the software collection includes SPSS and computer-based tutorials in basic science and clinical subjects, including patient case simulations and question banks for content review. Students may also access the Internet via the workstations in the computer labs. The Digital Library provides access to a wealth of licensed resources for all programs.

The PCOM Digital Library provides access to a wealth of licensed Internet resources, including over 10,000 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. Print subscriptions to a number of core journal titles constitute a reading room collection for the Information Commons. The PCOM library electronically provides articles from any print-only titles in its collection to GA-PCOM users.

At the Philadelphia Campus, an open-access student computer lab is located adjacent to the Evans Hall student lounge area with more than 46 workstations and several printers. There are an additional 23 workstations and a printer in the library database room on the second floor of the library. Rowland Hall has acomputer lab with an instructor's station and 16 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.

Georgia Campus provides computer access in the Information Commons.

#### Libraries

The mission of the Library is to support the educational, research and clinical activities of the College through provision of information resources and services. The Library provides access to a wide range of licensed information resources and assists users in acquiring the skills necessary to use these resources effectively.

All physical and electronic holdings are identified in the Online Catalog. The PCOM Digital Library is an online collection of databases, mobile apps, e-books, full text journals, catalogs of biomedical collections and subject guides to the ever expanding web of biomedical sites. The Library has invested in powerful discovery tools to facilitate access to digital resources and they are accessible 24/7 to PCOM faculty, students and staff worldwide.

#### Philadelphia Campus

The OJ Snyder Memorial Library is located on the first and second floors of Evans Hall. It houses computers to support use of the PCOM Digital Library, print collections, group study rooms and study space.

#### Georgia Campus Information Commons

The library is known as the GA Information Commons and it houses computers to support use of the PCOM Digital Library, print collections, a reading room, group study rooms, study space and an assortment of models, including skeletons, muscle figures and organs.

#### Collections

The print collections are small and comprised of course reserves, reference, leisure reading and items that circulate. Circulation desks also have electronic chargers and mini-whiteboard kits available.

OneSearch+ is a powerful discovery tool to the PCOM Digital Library; it simultaneously searches multiple databases (many of which contain videos, images and clinical simulations), books, full-text e-journal collections and more. Many online resources contain mobile applications downloadable to smartphones for the "on the go" PCOM community. Embedded within PCOM's licensed collections are links to full-text resources and the interlibrary-loan gateway.

The Digital Commons@PCOM is an institutional repository that provides open access to faculty and student research, dissertations, theses and papers, College historical collections and publications.

#### Services and Staffing

The library staff provides education, reference, outreach, access, collection development, materials acquisition and processing, archives custody and research, and interlibrary loan services. Liaison Librarians collaborate with faculty to create curriculum focused subject guides and facilitate and maximize the use of collection resources. They also collaborate with faculty to ensure that information literacy skills and appropriate electronic resources are integrated into teaching programs. The Libraries are staffed by librarians, coordinators, library assistants and student workers.

#### Consortia Memberships

Consortia provide a means for libraries to manage licensed resources more efficiently and for their staffs to have access to support and educational opportunities that enhances

skills. PCOM is a member of the following:

TriState College Libraries Cooperative (TCLC). PCOM faculty and students may borrow items from TCLC libraries by presenting a letter of introduction authorized by a PCOM librarian.

Pennsylvania Academic Library Consortium Inc. (PALCI). EZBorrow, a shared web gateway allows simultaneous searching of academic library catalogs in Pennsylvania and select New York and New Jersey colleges. Pennsylvania library users can directly initiate requests for most items found on the site using the LIB# on the PCOM ID card.

National Network of Libraries of Medicine (NN/LM). PCOM Library is a member of DOCLINE®, the NN/LM's interlibrary loan system.

NorthEast Research Libraries (NERL). PCOM Library maintains institutional licensing arrangements with NERL for online resources.

Lyrasis. PCOM Library maintains institutional licensing arrangements with Lyrasis for online resources.

#### Social Media

The Library communicates with the PCOM community via campus CCTV, e-mail, Facebook, Twitter, Instagram and chat services.

#### 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.

#### Evans Hall

Medical and graduate students receive hundreds of instructional hours in the two amphitheaters 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 and conference rooms are equipped for full twoway videoconference broadcasts.

The seven levels of Evans Hall also house the College library, Office of the Provost, 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. Video monitors are built into the lecture amphitheaters, 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 and Development and the Office of Marketing and 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, including a newly constructed family medicine suite, 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 Michael and Wendy Saltzburg Clinical Learning and Assessment Center. Also housed in Rowland Hall are the following College support services departments:

Bursar's Office Compliance Office Diversity Office Financial Administration Financial Aid Graduate Medical Education Human Resources ITS and Telecommunications Plant Operations Purchasing Registrars Office Risk Management Safety and Security

#### Activities Center

Both campuses provide students with access to fitness equipment as well as to a variety of exercise classes. Access to the fitness centers is free for all current students and employees. There is a fee for all significant others and guests.

#### 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 Family Medicine – Peter F. Bidey, DO Medical Director

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

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

PCOM Healthcare Center – Roxborough Division located Philadelphia Campus Larry Finkelstein, DO, Director

PCOM Sullivan County Medical Center Ernest Gelb, DO, Medical 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 AtlantiCare Regional Medical Center Bayhealth Medical Center Bedford Memorial Hospital Beebe Medical Center Blue Mountain Health System Chestnut Hill Hospital Christiana Health Care Community Medical Center Crozer Keystone Health System Deborah Heart and Lung Delaware Health Services Doylestown Hospital East Central AHEC Easton Hospital Fairfield Medical Center Franklin Square Hospital Friends Hospital Good Samaritan Hospital Heart of Lancaster Hospital Inspira Medical Center Jersey Shore University Medical Center Kent General Hospital Latrobe Hospital Lehigh Valley Hospital

Lerch Pediatrics Lewistown Hospital Meadville Medical Center Mercy Catholic Medical Center Mercy Suburban Hospital Mountainview/Hanover Hospital North Central AHEC Pennsylvania Hospital Phoenixville Hospital Pinnacle Health System Roxborough Memorial Hospital Saint Francis Hospital Saint Joseph's Hospital Saint Joseph Medical Center St. Luke's Hospital Allentown St. Luke's Hospital Bethlehem St. Luke's Hospital Quakertown St. Luke's Hospital Warren Soldiers and Sailors Hospital The Medical CenterBeaver Heritage Valley The Wright Center UHS Wilson Medical Center UMDNJ Rowan Union Memorial Hospital UPMC Hamot UPMC Mercy Hospital UPMC Shadyside Hospital WilkesBarre Academic Center Williamsport Hospital and Medical Center WilkesBarre Academic Center Wyoming Valley Health System

#### Core Clinical Campus Sites

Conemaugh Memorial Medical Center Einstein Heathcare Network Geisinger Danville Geisinger Northeast Pennsylvania Main Line Health Reading Health System UPMCHorizon

#### Georgia Campus Facilities

Georgia Campus – PCOM is a campus designed with student learning, cutting- edge instructional technology and social interaction at the forefront. GA-PCOM occupies 20 acres in the northern Atlanta suburb of Suwanee, which has been featured on Kiplinger and Money magazines' best cities lists.

The campus facility is uniquely and conveniently housed in a modern 150,000- squarefoot building. Its design includes two architectural main focal points that take advantage of natural light through the use of skylights and partitions. In 2012 PCOM acquired an adjacent building at 2601 Northlake Drive, and this facility now houses academic support staff and the Physician Assistant Program.

In addition to large and small classrooms, conference areas and study spaces, Georgia

Campus instructional space includes a large anatomy laboratory, the osteopathic manipulative medicine teaching laboratory and the clinical learning and assessment center. In addition, the facility houses biomedical science and pharmacy research and multi-use laboratories, three pharmacy practice labs and an osteopathic manipulative patient care unit.

Open circulation areas facilitate social interaction and ease of access to student services, learning resources and instructional spaces. Student life services also include a central dining area, student lounge, game room 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.

GA-PCOM's facility offers state-of-the-art technology to enhance learning experiences for students. The campus emphasizes substantial use of computer technology that includes a wireless network, digital video and distance learning capability, digital medical and pharmaceutical libraries, and many databases for research and review.

#### Affiliated Hospitals

55th Medical Group AAMC Agreement Adena.Ross EM Group Advantage Behavioral Health Systems Aiken Regional Albany Area Primary Heath Care Inc. Anderson Medical Center Archbold Memorial Hospital Arrowhead Regional Medical Center Athens-Limestone Hospital/AMEC Atlanta Medical Center Baptist Cardiology, Inc. Baptist Emergency Center Clay Baptist ENT Specialist, Inc. Baptist Health Baptist Health Rehabilitation Centers Baptist Health System Baptist Medical Center Beaches Baptist Medical Center Nassau Baptist Medical Center Outpatient Center Baptist Medical Center South Baptist Neurology, Inc. Baptist Primary Care, Inc. Baptist Pulmonary Specialist, Inc. Baptist Southeast Gynecology/Oncology Assoc. Baptist Urology, Inc. Barrow Regional Medical Center BlackRiver Health Services Blanchfield Army Community Hospital Bleckley Memorial BlueRidge Healthcare Board of Regents of the University System Georgia Bolivar Hospital Boswell Memorial Hospital Brooke Army Medical Center

Brooks County Hospital Brookwood Medical Center Cabarrus FM Residency Program Carilion Clinic Carl R. Darnell Army Medical Center Chattanooga Hamilton County Health Department Chatuge Regional Chestatee Regional Hospital Chester Regional Hospital Children's Healthcare of Atlanta Clearview Regional Medical Center CMC Northeast Colonel Florence A. Blanchfield Army Colquitt Regional Medical Center Columbus Regional Medical Center Conway Medical Center Copper Basin Medical Center Crestwood Medical Center/AMEC Crisp Regional Health Services Crozier Keystone Health System Cumberland Medical Center Curtis V. Cooper Primary Health Care Cuyahoga Falls General Hospital Decatur Morgan Hospital Decatur Morgan Hospital/AME DeKalb Medical Center Doctor's Hospital of Sarasota Dorminy Medical Center Duke University Durham D.W. McMillian Memorial Hospital/AMEC Dwight D. Eisenhower Army Center Early Memorial Hospital East Alabama Medical Center East Arkansas Family Health Center East Georgia Regional Medical Center Eastside Medical Center Evans Surgical Center Evergreen Medical Hospital/AMEC First Health of the Carolinas Flint River Community Hospital Florida Hospital East Orlando Florida Hospital Waterman Flowers Hospital/AMEC Floyd Medical Center Franciscan St. James Health Georgia Mountain Health Services Gordon Hospital Grady General Hospital Gwinnett Medical Center Franciscan St. James Health Habersham County Medical Center Harbin Clinic

Hardin Memorial Hospital Hart County Hospital Health Source of Ohio Henry County Medical Center Hospital for Special Care Houston Medical Center/Perry Hospital Houston Orthopedics and Sports Medicine Hughston Memorial Hospital and Clinic Hutcheson Medical Center Inspira Medical Center Integris Health, Inc. IPC of Colorado Jackson Hospital/AMEC Iacksonville Orthopedic Institute Jefferson Hospital Kershaw County Medical Center Lake Cumberland Regional Hospital Lewis Gayle Regional Health System Liberty Regional Medical Center Long Beach Medical Center LSU Rural FM Residency Program Lyerly Baptist, Inc. Madigan Army Medical Center Manatee Glens Bradenton Margaret R. Pardee Martin Army Hospital Martin Memorial Regional Hospital McKinney Community Health Center McLeod Regional Medical Center Meadows Regional Medical Center Med Link Georgia Medical Center of Central Georgia Medical Center of Manchester Medical Center, Inc. Memorial Hermann Metro Health Hospital Migrant Farm Workers, LLC Minnie G. Boswell Memorial Hospital Mitchell County Hospital Montgomery Regional Hospital Mountain Area Health Ed Center Murray Medical Center Naval Hospital Jacksonville Naval Hospital Pensacola Naval Hospital Portsmouth Neighborhood Improvement Project Newton Medical North Georgia Medical Center Northeast Georgia Medical Center Northeast Georgia Physicians Group Northeast Regional Medical Center Northlake Surgical Center Northridge Medical Center

Northside Hospital Atlanta Northside Hospital Cherokee Northside Hospital Forsyth Novant Health Affiliates Oconee Health System, Inc. OCH Regional Medical Center Ohio Valley Medical Center/East Ohio Regional OK Center for Orthopedic and Multi-Specialty Surgery Palmetto Health Council PBCGME/Columbia Hospital Peach Regional Medical Center Peachford Behavioral Systems Pender Memorial Hospital Phoebe Putney Memorial Hospital Phoebe Sumter Medical Center Physicians for Women, PC Physicians Medical Center Carraway Piedmont Healthcare Plantation General Hospital Primary Care of Southwest Georgia Premier Community Health Providence Health and Services Putman General Hospital Randolph Hospital Regional Medical Center Redmond Regional Medical Center Resurgens, P.C. Rockdale Medical Center Samaritan Health Services Scott Memorial Hospital Self Regional Medical Center Serenity Behavioral Health System Shepherd Center South Baldwin Regional Medical/AMEC South Georgia Medical Center South Jersey Healthcare Southeast Alabama Medical Center Southeast Alabama Rural Health Assoc. /AMEC Southeast Georgia Health System Southeast Regional Primary Care Corp. Southeastern Health Southern Regional AHEC/FM Residency Southern Regional Health System Southwest GA Healthcare. Inc. St. Claire Regional Medical Center St. Francis Hospital and Health Centers St. Francis Hospital St. Francis - Bradley Center St. Francis Medical Center St. Joseph/Candler St. Luke's St. Vincent Hospital

St. Vincentis East Stephens County Hospital Summa Western Reserve Hospital Summit Surgical Specialists Tanner Health System Taylor Regional Hospital Tift Regional Medical Center Union General Hospital, Inc. Upson Regional Medical Valdosta Women's Health Center Valley Hospital Medical Center Valley View Hospital Walter Reed Army Medical Center Washington County Regional Medical Center Wayne Memorial Hospital Wellmont Hawkins County Memorial Hospital Wellmont Health System Wellstar Health System West End Medical Centers West Georgia Health System William S. Hall Psychiatric Institute Wilmington Health Wolfson Children's Hospital Womack Army Medical Center Woman's Hospital

### PROGRAMS OF STUDY

### Doctor of Osteopathic Medicine – Philadelphia and Georgia Campuses

#### 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:

- 1. The human body is a unit in which structure and function are reciprocally interdependent.
- 2. The body, through a complex system, tends to be self-regulating and self- healing.
- 3. The adequate function of body-systems depends on the unimpeded flow of blood and nerve impulses.
- 4. The musculoskeletal system is a major body-system and its importance exceeds that of mere framework and support.
- 5. 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 selfevaluation 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, reproductive, endocrine, nervous 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 evidence-based medicine 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 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.

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 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 underserved 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 high medical need.

#### 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 are regulated by the laws of each state.

#### Pre-Doctoral 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 Chief Science Officer.

### <u>Dual Degree Programs</u>

#### DO/PhD in Cellular and Molecular Biology (Philadelphia Campus)

The Joint DO/PhD Program is a collaborative initiative between the Philadelphia College of Osteopathic Medicine and the University of the Sciences in Philadelphia (USci).

The purpose of the program is to provide a joint degree offering for students who wish to pursue physician-scientist careers, and the program is designed for students with specialized career plans. The research-intensive program provides three full years of research fellowship training in addition to the four year osteopathic medical program. The three year research component culminates in a research project and dissertation defense. A stipend and support for supplies/equipment are awarded in the research years.

The DO/PhD Program is designed to train physician-scientists who will contribute to the fund of knowledge by conducting original, high-quality scientific research with the perspective of a clinical practitioner. The program represents a critical link between bench and bedside by combining medical training with research training and will produce clinical scholar-practitioners who can make ongoing contributions to the osteopathic clinical, scientific and academic community.

Students are accepted into the program as part of their original application to osteopathic medical school through a special admissions process; hence acceptance to the DO and PhD components occurs simultaneously, with USci approving the acceptance into the PhD program. Non-acceptance to the joint DO/PhD Program does not preclude a student from being accepted to the DO program only, through the normal PCOM admissions process.

PCOM awards the Doctor of Osteopathic Medicine degree after successful completion of the DO Program. USci awards the Doctor of Philosophy degree upon successful completion of all requirements for the PhD in Cell and Molecular Biology, including dissertation defense and submission of a final manuscript for publication. For information regarding admission: http://www.pcom.edu/Admissions/admissions.html

#### DO/MBA Program (Philadelphia Campus)

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 and MBA degrees. Created in 1989 as the nation's first DO/MBA degree, the curriculum requires approximately 39-45 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. Georgia Campus students may enroll in the DO/MBA through online courses.

Students who are interested in business administration but do not wish to enroll in the full MBA program may complete a 5-course Graduate Business Certificate during the second year of medical school. The Saint Joseph's University MBA is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

#### DO/MPH Program (Philadelphia Campus)

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 and DO/MA programs, 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).

Students may also choose to enroll in a DO/MPH program in affiliation with Jefferson School of Population Health, which provides a 36-credit program that includes core public health disciplines in behavioral and social sciences, biostatistics, epidemiology, environmental health services and health policy. The Jefferson DO/MPH program is completed during a one-year leave from medical study, following the third medical year. Upon return to the clinical clerkships (fourth year medical curriculum) DO/MPH students combine senior clinical training with the completion of the MPH program through an elective public health clerkship in a PCOM clinical service, followed by completion of the Jefferson MPH capstone project.

#### DO/MS/PhD in Health Policy Program (Philadelphia Campus)

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.

## <u>On-Campus Dual-Degree Programs and Undergraduate Medical</u> <u>Fellowships</u>

# Undergraduate Fellowship in Osteopathic Manipulative Medicine (Philadelphia and Georgia Campuses)

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/MS in Forensic Medicine (Philadelphia and Georgia Campuses)

Students who have successfully completed their first year of medical study at PCOM may enter a special dual degree program provided by PCOM's Department of Pathology and Forensic Medicine. Students complete forensic medicine graduate work through Philadelphia campus weekend courses and online instruction during an extended sophomore medical year; the DO and MS program is five years in length. 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 (Philadelphia Campus)

Students who have successfully completed their first year of medical study at PCOM may enter a special dual degree program provided by PCOM's Department of Psychology, leading to a master of science in Organizational Development and Leadership (ODL) and Doctor of Osteopathic Medicine in five years. Students complete graduate work through on-campus evening class sessions 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. Georgia Campus students may undertake Organizational Development and Leadership training on-campus through a graduate certificate program.

#### DO/MS in Mental Health Counseling (Philadelphia Campus)

Students who have successfully completed their first year of medical study at PCOM may enter a special dual degree program provided by PCOM's Department of Psychology, leading to a master of science in Mental Health Counseling and Doctor of Osteopathic Medicine in five years. Students complete graduate work through on–campus evening class sessions during an extended sophomore medical year. The MS in Mental Health Counseling is committed to the practitioner-scholar model of training, encouraging students to integrate psychological theory, techniques and research into clinical practice. The cognitive-behavioral therapy (CBT) model is emphasized, and students are provided the unique opportunity to practice CBT techniques and conceptualization with videotaped, standardized mock patients.

## COURSE SEQUENCE

### Doctor of Osteopathic Medicine (DO) – Philadelphia Campus

# First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
DO 111	.Structural Principles of Osteopathic Medicine	14
	.Osteopathic Principles and Practice I	
DO 140A	.Primary Care Skills I	1
	Total Credits	17

#### TERM 2 (WINTER)

Course No	Course Title	Credits
DO 121	.Cellular and Molecular Basis of Medicine	13
DO 139B	.Osteopathic Principles and Practice II	2
DO 140B	.Primary Care Skills II	1
	Total Credits	16

#### TERM 3 (SPRING)

Course No	Course Title	Credits
DO 133	Emergency Medicine I	1
DO 134	Cardiovascular, Renal and Pulmonary Medicine	12
DO 139C	Osteopathic Principles and Practice III	2
DO 140C	Primary Care Skills III	1
DO 144	Clinical Reasoning in Basic Sciences I	1
	Total Credits	17

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

## Doctor of Osteopathic Medicine (DO) – Philadelphia Campus

# Second Year

TERM 1 (FALL)		
Course No	Course Title	Credits
DO 212	.Gastroenterological Sciences	4
DO 213	.Reproductive Genitourinary and Obstetrics,	
	Gynecologic Medicine	7
DO 224	.Musculoskeletal Skin I	1
DO 231	.General Surgery and EENT	2
DO 238A	.Preventive and Community-Based Medicine I	1
DO 239A	.Osteopathic Principles and Practice IV	2
DO 240A	.Primary Care Skills IV	1
DO 311	.Medical Law	2
	Total Credits	

#### TERM 2 (WINTER)

Course No	Course Title	Credits
DO 221	.Clinical Endocrinology	2.5
	.Clinical and Basic Neuroscience	
DO 224	.Musculoskeletal Skin II	1.5
DO 238B	.Preventive and Community-Based Medicine II	1
DO 239B	.Osteopathic Principles and Practice V	2
DO 240B	.Primary Care Skills V	1
	Total Credits	

#### TERM 3 (SPRING)

Course No	Course Title	Credits
DO 145	.Clinical Reasoning in Basic Sciences II	1
DO 146	.Comprehensive Basic Science Review and Synthesis	1
DO 233	.Life Stages: Clinical Geriatrics and Pediatrics	4
DO 235	.Emergency Medicine II	1
DO 238C	.Preventive and Community-Based Medicine III	1
DO 239C	.Osteopathic Principles and Practice VI	2
DO 240C	.Primary Care Skills VI	1
	Total Credits	11

# <u>Doctor of Osteopathic Medicine (DO) – Philadelphia Campus</u> Third and Fourth Year Clinical Clerkship Curriculum

## Third Year (12 Months)

ROTATION	CREDIT HOURS
Advanced Clinical Skills	17*
Introduction to Clerkships	
Family Medicine	
General Internal Medicine	
General Surgery	
Internal Medicine/Cardiology	
Internal Medicine Selective	
Obstetrics and Gynecology	
OMM/Family Medicine/Palliative Care	
Pediatrics	
Psychiatry	
Surgery	
Winter Break	

## Fourth Year (12 Months)

ROTATION	CREDIT HOURS
Elective (6)	
Emergency Medicine	
Healthcare Center	
Rural	
Urban (2)	34
Medicine Sub-Internship	17

Each 17 credit rotation requires 240 contact hours

Other than in electives, fourth year rotations contain a component of Osteopathic Manipulative Medicine.

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

## COURSE DESCRIPTIONS

### Doctor of Osteopathic Medicine (DO) – Philadelphia Campus

#### DO 111 – Structural Principles of Osteopathic Medicine – (SPOM) 14 credits

This 13-week course covers human anatomical sciences including gross anatomy, development (embryology), cellular anatomy (histology) and radiology. Knowledge of anatomical science is the foundation of medical education and clinical practice. Lectures and laboratory sessions that incorporate active learning strategies will cover the anatomical sciences. Gross Anatomy and Radiology are presented from a regional perspective. Cellular Anatomy and Development are presented from a systems-based perspective and correlate with the regional anatomy being presented. Students will be required to apply their knowledge of gross anatomy, development, cellular anatomy and radiology to explain clinical case vignettes and medical images. Cellular anatomy addresses anatomical structures and function at the microscopic and molecular levels. Digital images will be used for the laboratory portion of cellular anatomy (histology). Reading assignments from textbooks will be used to reinforce, clarify and extend the material presented in lecture.

Cadaver dissections are coordinated to follow gross anatomy lecture content. Plastinated specimens, X-rays, CT scans and MRI images, bones, and models will be available for students to study. Clinical faculty and OMM Fellows will be available during laboratories to reinforce the clinical anatomy correlations. The student will gain an appreciation for the relevance of anatomical sciences to clinical osteopathic medical practice.

# DO 121 – Cellular and Molecular Basis of Medicine 13 credits

This course introduces students to the study of disease. Course goals include providing students with a broad, fundamental knowledge in molecular biology, genetics, medical biochemistry, microbiology, immunology, pathology and pharmacology. Major conceptual areas introduced in this course include cellular injury induced by physical, chemical and microbial entities, the host-parasite relationship with discussions of microbial pathogenicity, infectious disease, acute and chronic inflammation, introduction to pharmacologic intervention, principles of clinical pharmacology; drugs' alteration of inflammatory and immune processes, and antimicrobial medications. Disease states receiving particular attention include genetic disease, nutritional disease, hematological diseases, infection, cancer and immune suppression. The basic science foundation necessary to comprehend these and other 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.

#### DO 133 – Emergency Medicine I 1 credit

This course teaches Basic Cardiac Life Support under American Heart Association standards and prehospital first responder skills; patient assessment in the pre-hospital environment and use of the automated external defibrillator (AED). Upon successful completion, the American Heart Association Healthcare Provider Course Card will be awarded.

#### DO 134 – Cardiovascular, Pulmonary and Renal Medicine 12 credits

The Cardiovascular, Pulmonary and Renal Medicine course (CPR) is an intensive informational guide through the cardiovascular, pulmonary and renal systems. The course is designed to introduce the student to this integrated area of medicine by presenting the basic biological science foundation of these three interrelated systems, and then relating these basics to the patient in a clinical setting. Students will be taught the basic physiology of these vital systems, followed by the etiology and pathogenesis of common/classic diseases that cause dysfunction. Diagnostic methodologies and use of laboratory tests will be explored, and appropriate use of pharmacological therapeutics will be learned. The purpose of this approach is to help the student better understand the medical interrelationships between these systems; helping the student to develop the ability to analyze a patient's condition based on important and specific parameters and thereby helping the student to gain a basic understanding of diagnosis and treatment of the disease processes that affect these systems.

We will begin with an overview of the physiological purpose of these related systems. The cardiovascular system will be considered first, and provides an in- depth discussion of cardiac and vascular mechanics, and electrophysiology of the myocardium, as well as pharmacology pathology and microbiology of the cardiovascular system. The unit continues by taking a similar approach in presenting the specific basics of the renal and pulmonary systems. Intermixed within the term and as the term reaches its conclusion will be case presentations and discussions of the important medical issues and approaches. Emphasis is placed on applying basic physiological/pathological and pharmacological concepts to clinical treatment and basic pathological and microbiological didactic knowledge to clinical diagnosis of each area separately and as an integrated group. Additionally, basic diagnostic methodologies (e.g., electrocardiography, radiography) and clinical laboratory medicine will be introduced. The student will be required to integrate diagnostic data obtained from these varied methods and form a differential diagnosis of a patient's condition. Students will be expected to then understand how to formulate a treatment plan to help restore the patient's normal physiological function.

To assist the student's ability to "think clinically," the course will feature several case-based practical reinforcement sessions, such as case conference, case presentations, morning report and patient perspective presentations.

#### DO 139A, 139B, 139C – Osteopathic Principles and Practice I, II, III 2 credits each term Total credits 6

This course introduces 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 is defined. Common musculoskeletal patient complaints, their osteopathic diagnosis and management are discussed. Therapeutic skills are developed 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 viscero-somatic, 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

The Primary Care Skills I, II, and III course develops knowledge, attitudes, and skills in osteopathic medical students to competently communicate with patients, understand the patient experience, obtain an accurate history, perform a physical examination, and properly document the medical record. Didactic lectures, skills labs, online modules, standardized patient sessions, and a shadowing experience in an ambulatory center are the methods used to teach and evaluate the student competencies.

#### DO 144, 145 – Clinical Reasoning in Basic Sciences I, II 1 credit each year

The development of critical thinking skills and the integration of basic and clinical science concepts are fostered in students through small-group learning activities utilizing written clinical cases. The cases are developed by basic and clinical science faculty and incorporate history and physical findings, laboratory values, imaging, electrophysiology and histopathological images as needed for students to develop differential and definitive diagnoses as well as treatment plans. Basic science underpinnings of each case, particularly the pathophysiology of disease are explored by students as guided by specific learning objectives. Student progress in critical thinking and integration of basic and clinical science concepts is assessed by tools which could include multiple choice exams, oral exams and construction of a portfolio which may contain literature searches, reflective writing, interviews with faculty and patients, videos or photographs.

#### DO 146 – Comprehensive Basic Science Review and Synthesis 1 credit

The purpose of the CBSRS course is to assist students in their preparation for the COMLEX 1 examination, by mandatory and structured usage of question banks, and internal and externally-generated formative assessment tools. Student progress is monitored by faculty, and students may be counseled regarding preparation strategies if necessary.

#### DO 212 – Gastroenterological Sciences

#### 4 credits

This course is a multidisciplinary integrated course designed to take the student in a thorough manner through the specific physiology of the gastrointestinal tract, pathophysiologic bases of the diseases of this system, pharmacologic interventions and applications, diagnostic specifics including interpretation of imaging methods such as gastrointestinal endoscopy and colonoscopy, and therapeutic strategies employed in the treatment of GI disease.

# DO 213 – Reproductive Genitourinary and Obstetrics, Gynecologic Medicine 7 credits

The Reproductive Genitourinary and Obstetric, Gynecologic Medicine (RGU) course content encompasses the basic and clinical biomedical sciences relevant to urology, obstetrics and gynecology. Lectures in physiology, pharmacology, microbiology and pathology provide a foundation for understanding clinical aspects of urologic and reproductive medicine. Information is distributed primarily through a lecture format, but

there also will be opportunities to participate in case-based exercises, simulated morning reports and a session focusing on a patient's perspective of a relevant health care topic.

#### DO 221 – Clinical Endocrinology

#### 2.5 credits

The pathophysiology and clinical manifestation of the endocrine disorders are presented, with particular emphasis on those affecting the pituitary, thyroid, parathyroid and adrenal glands. This course also addresses metabolic disorders and vitamin and nutritional disturbances.

#### DO 222 – Clinical and Basic Neuroscience

#### 11 credits

The Clinical and Basic Neuroscience course coordinates all disciplines related to the central nervous system. It is a comprehensive course on the central nervous system integrating blocks related to neuroscience, neurology, psychiatry, neurosurgery, neuropathology, neuropharmacology, and physical medicine and rehabilitation. Also discussed are the 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. Psychiatric and behavioral medicine with implications for the generalist physician are incorporated throughout the following course components: 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; hydrocephalus/NPH, peripheral nerve disorders and brain tumors. Pain and pain management are addressed with a focus on anesthetics, including general, local and narcotic; emotional overtones of pain; relation to addiction; narcotic intervention use and precautions. Additional pharmacologic basis of treatment and precautions are addressed as they relate to 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 with special session included discussing the impaired physician. Psychiatry topics include the evaluation of the psychiatrically ill patient and principles of diagnosis; special topics are discussed including substance abuse disorders, child and adolescent psychiatry, geriatric psychiatry, principles of psychosomatic medicine and psychiatric emergencies.

#### DO 224 – Musculoskeletal Skin I and II

#### 2.5 credits total

This course presents students with clinical lectures in the pathogenesis, diagnosis and management of diseases affecting the musculoskeletal system, with particular emphasis on rheumatologic disorders, and the skin. The unit objectives are designed to target appropriate completion of two specific tests of competence for students: successful performance on board examinations (COMLEX) and successful preparation for clerkship clinical experiences in years 3 and 4 of the PCOM DO program.

#### DO 231 – General Surgery and EENT

#### 2 credits

The SEENT course is a compilation of the multiple disciplines composing the department of surgery. The course is designed to acquaint the medical student with the potentialities

and drawbacks of the application of surgery, in the diagnosis and treatment of disease states. The course will be presented predominantly in a didactic format with case-based learning and simulation technology included in the course material. Also, students are actively encouraged to engage in shadowing, grand rounds, and morning reports, as adjuncts to the topics covered.

# DO 233 – Life Stages: Clinical Geriatrics and Pediatrics 4 credits

#### - Clinical Geriatrics

The Clinical Geriatrics portion of this course provides an understanding of 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

The Pediatric portion of this courses explores normal development and evaluation; fetus; high-risk pregnancies; premature and newborn high-risk problems; difficulties affecting perinatal care of premature and full-term infants. Also discussed will be preventive pediatrics (hygiene, infant feeding and immunizations) in ambulatory office practice; hospital critical care. Childhood gastrointestinal, surgical, hematologic, nose and throat, and cardiovascular problems; other disease processes and influences on fetus, newborn and general pediatric population. Other topics such as 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 will be explained.

#### DO 235 – Emergency Medicine II

#### 1 credit

This course will consist of 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 238A, 238B, 238C – Preventive and Community-Based Medicine I, II, III 1 credit each term

#### Total credits 3

The goal of this course is to introduce future osteopathic physicians to medical ethics, evidence-based medicine, public health and health policy. Emphasis will be placed on developing an evidence-based medicine approach to patient care that is guided by the physician's ethical and professional responsibilities to their patients, community and society. This course will use various teaching methods, including small group sessions, case discussions, role-playing, standardized patient encounters, online teaching and lectures.

#### DO 239A, 239B, 239C – Osteopathic Principles and Practice IV, V, VI 2 credits each term Total credits 6

The Osteopathic Principles and Practice IV,V, and VI develops the knowledge of 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 are reviewed; as well as 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

The Primary Care Skills IV, V, and VI course develops knowledge, attitudes, and skills in osteopathic medical students to competently communicate with patients and other medical professionals, utilize the concepts of patient and family- centered care, obtain a comprehensive and focused patient history and physical, document the medical record, and incorporate the concepts of patient safety in medical settings. Didactic lectures, skills labs, online modules, and standardized patient sessions are the methods used to teach and evaluate the student competencies.

#### DO 311 – Medical Law

#### 2 credits

This course addresses the legal obligations and ethical responsibilities of physicians, both professionally and personally, including medico-legal issues such as judicial process, fraud and abuse, malpractice, torts, patient rights and privacy issues; issues related to HIPPA and compliance. This online course 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 during ACS clerkship. Students are awarded the AHA ACLS course card, valid for two years, upon successful completion. This is required for graduation.

## COURSE SEQUENCE

### Doctor of Osteopathic Medicine (DO) – Georgia Campus

# First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
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
INDP 100G	.Interprof Approach Caring for Community	0
	Total Credits	18

#### TERM 2 (WINTER)

Course No	Course Title	Credits
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
INDP 100G	Interprof Approach Caring for Community	0
	Total Credits	19

#### TERM 3 (SPRING)

Course No	Course Title	Credits
DO 130G	.Basic and Clinical Neurosciences	14
DO 133G	.Emergency Medicine I	1
	.Preventive and Community-Based Medicine III	
DO 139CG	.Osteopathic Principles and Practice III	2
DO 140CG	.Primary Care Skills III	2
INDP 100G	.Interprof Approach Caring for Community	0
	Total Credits	20

### Doctor of Osteopathic Medicine (DO) – Georgia Campus

# Second Year

TERM I (FALL)		
Course No	Course Title	Credits
DO 134G	. Cardiovascular, Pulmonary and Renal Medicine	12
DO 144G	. Clinical Reasoning in Basic Sciences I	1
DO 214G	. Musculoskeletal/Skin I	2
DO 239AG	. Osteopathic Principles and Practice IV	2
DO 240AG	. Primary Care Skills IV	1
DO 311G	. Medical Law	2
	Total Credits	20

#### TERM 2 (WINTER)

Course No	Course Title	Credits
DO 145G	Clinical Reasoning in Basic Sciences II	1
DO 211G	Basic and Clinical Endocrinology	3
DO 212G	Gastroenterology	4
DO 213G	Reproductive and Genitourinary Sciences	6
DO 214AG	. Musculoskeletal/Skin II	2
DO 239BG	Osteopathic Principles and Practice V	2
DO 240BG	Primary Care Skills V	1
	Total Credits	19

#### TERM 3 (SPRING)

Course No	Course Title	Credits
DO 146G	Comprehensive Basic Science Review and Syn	thesis1
DO 215G	Psychiatry	
DO 232G	Surgery, Ophthalmology, ENT	
DO 233G	Life Stages: Geriatrics and Pediatrics	
DO 235G	Emergency Medicine II	
DO 239CG	Osteopathic Principles and Practice VI	
DO 240CG	Primary Care Skills VI	
	Total Credits	

# **Doctor of Osteopathic Medicine (DO) – Georgia Campus** Third and Fourth Year Clinical Clerkship Curriculum

# Third Year

ROTATION

#### CREDIT HOURS

<b>KOTHTION</b>	CKLDII IIO
Advanced Clinical Skills	17*
Elective	17
Family Medicine	17
General Internal Medicine	17
General Surgery	17
Internal Medicine Selective	17
Obstetrics and Gynecology	17
OMM/Family Medicine	17
Pediatrics	
Psychiatry	17
Surgery Selective	17
Internal Medicine - Ambulatory	17

# Fourth Year

ROTATION	CREDIT HOURS
Adult Geriatric Medicine	
Electives (5)	85
Internal Medicine	
Elective	
Underserved/Rural Family Medicine	34
Surgery Elective	
Emergency Medicine	17

Each 17 credit rotation requires 240 contact hours.

Other than in electives, fourth year rotations contain a component of Osteopathic Manipulative Medicine.

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

## COURSE DESCRIPTIONS

### Doctor of Osteopathic Medicine (DO) – Georgia Campus

# INDP 100G - Interprofessional Approach to Caring for the Community 0 credits per term for 3 terms

In this course, students from various health care professional programs work together to discuss and investigate approaches to solving health care-related issues as an inter-professional, collaborative team. The course consists of six 2-hour sessions spread over a single academic year. Students meet in the lecture hall, as well as in small groups with a faculty facilitator to discuss issues including medical ethics, team-work and leadership in health care delivery, cultural/religious competency, medical errors and prescription and non-prescription drug abuse and opioid addiction.

# DO 111G – Structural Principles of Osteopathic Medicine 13 credits

This 13 week course covers human anatomical sciences including gross anatomy, embryology and microscopic anatomy. Content for each anatomical science is presented from both a regional and systems perspective. Lectures and laboratory sessions incorporate active learning strategies. Students are required to apply their knowledge of gross anatomy, embryology and microscopic anatomy to explain clinical case vignettes and medical images of anatomical structures. Microscopic anatomy is presented via digital images during lectures and laboratories, relating microscopic structure to basic physiological processes. Reading assignments from required anatomy texts are used to reinforce, clarify and extend the material presented in lectures. Full cadaver dissection gross anatomy laboratories are coordinated to follow corresponding regional lecture content. Prepared dissection specimens, X-rays, CT scans and MRI images as well as bones, models and computer resources are available for students to study. Clinical faculty are available during laboratories to reinforce clinical anatomy correlations. This practice provides the student with an appreciation for the relevance of anatomical science to clinical osteopathic medical practice through demonstrations, clinical case studies and discovery in laboratory dissections.

# DO 121G – Cellular and Molecular Basis of Medicine 14 credits

This course introduces students to the study of normal cellular physiology and molecular biology, and its changes in the disease state. Course goals include providing students with a broad, fundamental knowledge 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 and other disease states is laid in this course. Students begin to practice self-directed learning, and improve communication skills by participating in group discussions. Students also gain an appreciation for basic and clinical research in fundamental biomedical topics through required reading of primary research literature and oral 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. In addition to neuroanatomy, the course is an integration of various disciplines including medicine, surgery, radiology, pathology, immunology and microbiology, physiology and pharmacology. The course presents the regional and systems neuroanatomy, 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, movement disorders 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 nonnarcotic pain relievers are presented.

#### DO 133G – Emergency Medicine I 1 credit

All students are trained in Basic Cardiac Life Support under American Heart Association standards and pre-hospital first responder skills. Emphasis is placed on teaching patient assessment in the pre-hospital 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 mechanisms 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 of 3 credits

This course introduces the future osteopathic physician to clinical preventive medicine and community-based medicine and focuses on the critical components of physician responsibility and advocacy in the development and delivery of health care systems in the United States. This year long course presents the fundamentals of evidence-based medicine, biostatistics, epidemiology, ethics, preventive medicine, public health, community medicine, infection prevention and control, environmental medicine, toxicology, occupational medicine, and disaster and emergency planning. The critical need for physician advocacy within the context of socio-cultural, economic, marketing and political competence is explored. Concepts and strategies from epidemiology, including bio-statistical analysis of current research studies, are applied to real case studies of community issues relevant to physician responsibilities. Current medico-legal, ethical and political issues are 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 in lectures and practice sessions to the concept and philosophy of the osteopathic school of the healing arts. 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 inter-segmental 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 the student begins his/her therapeutic development with soft tissue, 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 will introduce Osteopathic medical students to the art of patient interview techniques and demonstration of physical examination. The course will delineate the structure and components of a medical history and how to record it appropriately. Competency in interpersonal skills and procurement of history is enhanced by the introduction and development of empathetic listening, inscription of essential information, recognizing non-verbal cues, and cultural awareness. 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 technique. The medical history is introduced, as are concepts in the osteopathic approach to primary care, psychosocial issues and the physician/patient relationship. The department utilizes skill workshops, lectures; small groups case discussions, standardized patient and the simulation model.

Standardized patient in Objective Structured Clinical Examination (OSCE) evaluation is included.

#### DO 144G and 145G – Clinical Reasoning in Basic Science I, II 2 credits total

Clinical Reasoning in Basic Science is a 2-term-long course in which the development of critical thinking skills and the integration of basic and clinical science concepts is fostered in students through small-group learning activities using clinical cases. The cases discussed by students incorporate history and physical findings, laboratory values, imaging, electrophysiology and histopathological images as needed for students to develop differential and definitive diagnoses as well as treatment plans. Following the case discussion, the basic science underpinnings of each case are explored by students guided by specific learning objectives.

Student's, working in small groups, analyze board-style questions that align with their current course work in preparation for Comlex part 1 Two exams are given per term over the content of the learning objectives and practice questions, and are short answer and/or multiple choice in format.

# DO 146G - Comprehensive Basic Science Review and Synthesis 1 credit

This course focuses on key concepts in basic and clinical science which students have learned in didactic courses, and for which comprehension is essential for success on the COMLEX-1 national board exam and clinical rotations. Assessment of student progress toward readiness for board passage is done through the use of the COMBANK q-bank. The student's activity on the q-bank is monitored by faculty. Students who fail to progress adequately in one or more disciplines are assigned a faculty mentor, and may be required to do remedial work.

#### DO 211G – Basic and Clinical Endocrinology

#### 3 credits

The endocrine course is an integration of various disciplines including physiology, pharmacology, pathology, internal medicine and radiology. Lectures begin with a review of basic endocrine physiology, and histology. Clinical lectures cover disorders of the pancreas, thyroid, parathyroid and adrenal glands, and their effects on other body-systems.

#### DO 212G – Gastroenterology

#### 4 credits

In the GI course, the basic pathophysiology of the gastrointestinal system is presented. 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 and their pharmacologic management. Clinical lectures emphasize diagnosis, imaging, medical and surgical management of gastrointestinal diseases.

#### 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 gynecological diseases including sexually transmitted diseases, their management and prevention. Diagnostic and operative gynecology procedures are presented. Lectures on the progress and management of normal pregnancy are presented and 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. Family planning, contraception, infertility, perinatal infections and gynecologic oncology and pharmacology associated with women's health issues are also presented. Consideration of disorders and diseases of the male genitourinary system, their diagnosis and management completes the course.

#### DO 214G, DO214AG – Musculoskeletal/Skin I, II

#### 4 credits

This two-part course covers the clinical areas of orthopedics, rheumatology and

dermatology as well as the pathology of diseases of the bones, joints and muscles. 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 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. The relationship between brain function and psychiatric illness is a continuing discussion throughout this unit. Topics presented include neuropharmacology, mood disorders, psychosis, substance abuse disorders, and child and adolescent psychiatry.

#### DO 232G – Surgery, Ophthalmology, ENT

#### 2 credits

#### - Surgery Unit

This unit emphasizes clinical diagnosis, treatment and surgical management of surgical diseases including pre-operative and post-operative care, fluids and colloids, burns and wound care, the acute abdomen, vascular surgery, breast surgery, chest trauma, shock, and anesthesia. Other areas of emphasis are universal precautions and OSHA regulations. Clinical lectures often use case presentations to integrate surgical procedures in disease management.

#### - Ophthalmology/EENT Unit

This unit emphasizes an understanding of the principles of medical and surgical diagnosis, treatment and management of diseases and injuries of the eyes, ears, nose and throat.

# 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, antenatal 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 hypertension, infections, pressure ulcers, immobility and movement disorders, incontinence and poly- pharmacy issues.

#### DO 235G – Emergency Medicine II

#### 2 credits

The course unit introduces the second year student to the specialty of emergency medicine, which is defined as a field of practice that draws upon a unique set of knowledge, skills, and attitudes to prevent, diagnose, and manage the acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioral disorders.

A series of lectures covers the etiology, diagnosis and treatment of the diseases and conditions that are commonly treated in the Emergency Room. The course is an integration of various disciplines including medicine, surgery, radiology, pathology, physiology, pharmacology and microbiology. The course is designed as a pre-clerkship program to transition the student into the realm of clinical medicine. It introduces students to a general overview of the different sub- sections of emergency medicine, emphasizing the immediacy and unpredictability of managing acutely ill patients in a team environment.

# 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, counter strain 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

This course will introduce Osteopathic medical students to advance level of patient

interview techniques and demonstration of physical examination. The course will continue to delineate the structure and components of a medical history with emphasis on competency in interpersonal skills, patient doctor relation/communication, development of assessment and plan in an Objective Structured Clinical Examination (OSCE) method. This course covers advanced physical examination skills, minor surgical skills and problem solving. Ophthalmologic and ENT examinations in the outpatient setting with advanced clinical workshops and case presentations. Small group laboratory instruction in general surgical skills includes sessions on surgical scrub and sterile technique, gloving and gowning, suturing, phlebotomy, IV and catheterization. The department utilizes skill workshops, lectures; small groups case discussions, standardized patient and the simulation model. Standardized patient in Objective Structured Clinical Examination (OSCE) evaluation is included at the end of each term.

#### DO 311G – Medical Law

#### 2 credits

This online course can be taken at any time beginning in the second year of

medical education. The entire course including the online assessments must be completed by the end of the third year. The course covers legal obligations and ethical responsibilities of physicians, both professionally and personally; medico- legal issues such as judicial process, fraud and abuse, malpractice, torts, patient rights and privacy issues, and issues related to HIPPA and compliance. Satisfactory completion of the HIPPA module is required to begin clinical clerkships.

#### Non-Credit Advanced Cardiac Life Support – Third Year Medical

American Heart Association Advanced Cardiac Life Support (ACLS) course; offered during ACS clerkship. Students are awarded the AHA ACLS course card, valid for two years, upon successful completion. This is required for graduation.

## 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 post-doctoral 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.

#### 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. All programs participate in the Electronic Residency Application Service (ERAS) and the AOA Intern/Resident Registration Program (the "Match").

The minimum requirements for admission to the Traditional Rotating Internship Program 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.

All application requests for internship should be made through ERAS and residency applications 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 215-871-6695 (fax)

#### 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 130 PCOM interns and residents are currently in GME training at PCOM.

PCOM also sponsors AOA-approved internship and residency programs at numerous PCOM MEDNet (OPTI) affiliated hospitals throughout Pennsylvania, New Jersey, New

York and Delaware, and PCOM also continues to establish programs in Georgia and Alabama, which include:

Abington Memorial Hospital\* Albert Einstein Medical Center\* Aria Health\* AtlantiCare\* Bryn Mawr Hospital\* Cahaba Medical\* Christiana Care Health Services\* Colquitt Regional Medical Center\* Crozer-Chester Medical Center\* Deborah Heart and Lung Center\* Delaware County Memorial Hospital/Crozer Keystone Health System\* Geisinger Health System\* Good Samaritan Hospital\* Gwinnett Medical Center\* Heart of Lancaster Regional Medical Center\* Heritage Valley Beaver\* Houston Health Care\* Hunterdon Medical Center\* Lankenau Hospital\* Latrobe Area Hospital and Health Network\* Lehigh Valley Health Network\* Lower Bucks Hospital\* Memorial Hospital, York\* Mercy Catholic Medical Center\* PCOM Consortium\* Pennsylvania Hospital\* Pinnacle Health at Community General Osteopathic Hospital\* Redmond Regional Medical Center\* The Reading Hospital and Medical Center\* Southeast Alabama Medical Center\* St. Joseph Medical Center (Reading)\* St. Luke's University Health Network\* Suburban Community Hospital\* Tenet Hahnemann University Hospital\* Trinity Medical Center\* UHS Wilson Medical Center\* UPMC Altoona Hospital\* UPMC McKeesport Hospital\* UPMC Mercy Hospital\* UPMC Shadyside Hospital\* UPMC St. Margaret Hospital\* Warren Hospital\* Williamsport Hospital and Medical Center\* Wright Center for GME\*

\*PCOM Sponsored Programs

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.

Internship – Approved Positions: 7 David Kuo, DO, Internship Director

Family Medicine – Approved Positions: 16 Peter Bidey, DO, Program Director

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

Geriatrics – Approved Positions: 6 Nicol Joseph, DO, Program Director

Hospice and Palliative Medicine – Approved Positions: 3 Katherine Galluzzi, DO, Program Director

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

Neuromusculoskeletal Medicine (NMM+1) – Approved Positions: 4 Lauren Noto-Bell, DO, Program Director

Neuromusculoskeletal Medicine (NMM/OMT) – Approved Positions: 3 Lauren Noto-Bell, DO, Program Director

Neurosurgery – Approved Positions: 12 Steven Yocom, DO, Program Director

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

Orthopedic Surgery – Approved Positions: 30 John McPhilemy, DO, Program Director

Otorhinolaryngology – Approved Positions: 15 John McGrath, DO, Program Director

Plastic and Reconstructive Surgery – Approved Positions: 8 Benjamin Lam, DO, Program Director

Reproductive Endocrinology – Approved Positions: 3 Jung K. Choe, MD, Program Director

Vascular Surgery – Approved Positions: 3 Gregory Domer, MD, Program Director

\*PCOM Sponsored Programs

## 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 or a college of allopathic medicine approved by the Liaison Committee on Medical Education.
- 2. Completion of PGY-1 Training approved by either the American Osteopathic Association or the Accreditation Council for Graduate Medical Education.
- 3. Full-time enrollment in a residency program at a PCOM-affiliated hospital. For interns and residents, there is no tuition fee.

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 to the director, clinical master of science program. Research is defined as an original prospective systematic inquiry into a biomedical subject to discover or revise facts, theories or 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 vice 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: Fred Goldstein, PhD, FCP Director, Clinical Master of Science Program Philadelphia College of Osteopathic Medicine 4170 City Avenue Philadelphia, PA 19131 215-871-6859

## DO Graduate Statistics

PCOM reports annually statistics related to Part III NBOME board exam results and the number of students who applied to and obtained placement in a graduate medical education program accredited by the American Osteopathic Association or the Accreditation Council for Graduate Medical Education or the military. These statistics may be found on the PCOM web site at:

http://www.pcom.edu/program-statistics/doctor-of-osteopathic-medicine.html

#### 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 included in the Pennsylvania Osteopathic Medical Association Newsletter, in the back under Calendar of Events. For the CME course calendar published annually, program information and fee/tuition schedules, inquiries should be addressed to:

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 Website at www.pcom.edu. Click on "Continuing Medical Education".

## PROGRAM OF STUDY

## <u>School of Pharmacy – Doctor of Pharmacy (PharmD) – Georgia Campus</u>

#### Philosophy

The PCOM School of Pharmacy – Georgia Campus curriculum emphasizes patientcentered 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 generalist 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 (three or four years) of general education, biomedical and sciences instruction at undergraduate colleges
- 2. the last four professional years of pharmaceutical sciences and pharmacy 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 PCOM academic programs in both Philadelphia and Georgia. The extension of coursework over the three terms of each academic year provides the opportunity for the across-the-curriculum development of skills. The curriculum is composed of courses in biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences. A number of elective courses are available to allow students to enhance their knowledge of pharmacy-related topics in specific areas. There are five Introductory Pharmacy Practice Experiences (IPPEs) in which students are given exposure to pharmacy practice in a variety of different specialty areas and begin their hands-on experiences. The final year of the program consists of the Advanced Pharmacy Practice Experiences (APPEs) in which students are required to complete eight different rotations. These rotations consist of five weeks in a particular pharmacy practice site.

Required rotations are:

- General Medicine
- Ambulatory Care
- Hospital Practice
- Community Practice
- Community Management

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

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

A comprehensive examination will be given at the end of the second and third professional years. These examinations assess knowledge and skills acquired during the curriculum. Students that do not pass the comprehensive exam will be allowed to take a remediation exam. Failure to pass the remediation examination will prevent a student from progressing to the next professional year and may result in dismissal from the program.

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 six years from the date of initial matriculation. PharmD graduates must demonstrate that they have acquired competency in six basic areas of knowledge, skills, abilities, behaviors and attitudes: 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 for candidates to take the pharmacist licensure examination, state 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 ACPE-accredited school/college 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 his or her 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 term, 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 his or her 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.

# COURSE SEQUENCE

### <u>School of Pharmacy – Doctor of Pharmacy (PharmD) – Georgia Campus</u>

# First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
PHAR 011G	. Portfolio I	0
	. Anatomy	
PHAR 112G	. Anatomy Laboratory	1
PHAR 116G	. Introduction to Drugs	3
PHAR 134G	. Biostatistics	3
PHAR 150G	. Biochemistry	3
INDP 100G	.Interprof Approach Caring for Community	0
	Total Credits	12

#### TERM 2 (WINTER)

Course No	Course Title	Credits
PHAR 012G	. Portfolio II	0
PHAR 113G	. Physiology and Pathophysiology I	4
	. Pharmacy Communications	
PHAR 141G	. Pharmaceutics	3
PHAR 145G	. Pharmaceutical Calculations	2
PHAR 155G	. Pharmacy Practice Laboratory I	1
PHAR 172G	. IPPE Community I*	1
INDP 100G	.Interprof Approach Caring for Community	0
	Total Credits	13

# TERM 3 (SPRING) Course No Course Title Credits PHAR 013G Portfolio III .0 PHAR 114G Physiology and Pathophysiology II .4 PHAR 162G Pharmaceutics Laboratory .1 PHAR 165G Drug Information and Introduction to Evidence-Based Medicine .3 PHAR 167G OTC .2 PHAR 169G Biopharmaceutics .3 PHAR 169G IPPE Community I\* .1 INDP 100G Interprof Approach Caring for Community .0 Total Credits .14

\*Each student will be randomly assigned IPPE (Introductory Pharmacy Practice Experience) for two out of the three terms (no fall) during the first year. Credit will be assigned in those two terms only.

## School of Pharmacy – Doctor of Pharmacy (PharmD) – Georgia Campus

Second Year TERM 1 (SUMMER)	
Course No Course Title	Credits
PHAR 261G PPE Community II**	1
PHAR 261G         PPE Community II**           Total Credits         Community II**	1
TERM 2 (FALL)	
Course No Course Title	Credits
PHAR 021G Portfolio IV	0
PHAR 211G Integrated Therapeutics I	
PHAR 214G Case Studies I	
PHAR 224G Immunology and Microbiology	4
PHAR 246G Pharmacy Practice	
PHAR 256G Pharmacy Practice Laboratory II	
PHAR 261G IPPE Community II***	
or	
PHAR 262G    Introductory Clinical Services II	1
Total Credits	14
TERM 3 (WINTER)	
Course No Course Title	Credits
PHAR 022G Portfolio V	0
PHAR 210G Health Care Systems	
PHAR 212G Integrated Therapeutics II	
PHAR 215G Case Studies II	
PHAR 227G Pharmacokinetics	
PHAR 241G Infectious Disease I	
PHAR 261G IPPE Community II***	9
or	
PHAR 262G Introductory Clinical Services II	1
Total Credits	14
TERM 4 (SPRING)	
Course No Course Title	Credits
PHAR 023G Portfolio VI	0
PHAR 213G Integrated Therapeutics III	
PHAR 216G Case Studies III	
PHAR 228G Pharmacy Administration	
PHAR 242G Infectious Disease II	
PHAR 261G IPPE Community II***	
or	
PHAR 262G Introductory Clinical Services II	1
PHAR 281G Dietary Supplements	2
PHAR 299G Comprehensive Examination Second Year	0
Total Credits	
**Five days in Summer (June–August).	

\*\*Five days in Summer (June–August).

\*\*\*Each student will be randomly assigned IPPE (Introductory Pharmacy Practice Experience) for two out of the three terms during the second year. Credit will be assigned in those two terms only.

## <u>School of Pharmacy – Doctor of Pharmacy (PharmD) – Georgia Campus</u>

Third Year		
TERM 1 (SUMM	/IER)	
Course No	Course Title	Credits
PHAR 171G	Total Credits	
	Total Credits	1
TERM 2 (FALL)	)	
Course No	Course Title	Credits
PHAR 031G	Portfolio VII	0
	Integrated Therapeutics IV	
PHAR 314G	Clinical Pharmacy	
	Case Studies IV	
PHAR 321G	Pharmacy Practice Laboratory III	
PHAR 323G	Drug Literature Evaluation	
PHAR 3XXEG	Elective**	
	Total Credits	
TERM 3 (WINT	TER)	
Course No	Course Title	Credits
DHAD 022C	Portfolio VIII	0

Course No		115
PHAR 032G .	Portfolio VIII	.0
PHAR 312G .	Integrated Therapeutics V	.4
PHAR 316G .	Case Studies V	.1
PHAR 346G .	Pharmacoeconomics	.3
	Toxicology	
PHAR 3XXEG	Elective**	.2
	Total Credits	13

#### TERM 4 (SPRING)

Course No	Course Title	Credits
PHAR 033G	Portfolio IX	0
PHAR 317G	Case Studies VI	1
PHAR 368G	Pharmacy Law and Ethics	4
PHAR 375G	. Capstone	4
	Seminar	
	Comprehensive Examination Third Year	
PHAR 3XXEG	. Elective**	2
	Total Credits	12

\*\*\*\*Five days (45 hours) in June or August. \*\* Students are required to take two 1-credit electives in each term during the third year. Elective offers vary each term.

## School of Pharmacy – Doctor of Pharmacy (PharmD) – Georgia Campus

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TERM 2 (FALL)		
Course No	Course Title	Credits
PHAR 4XXG	.APPE III	4
PHAR 4XXG	.APPE IV	4
	Total Credits	8

#### TERM 3 (WINTER)

Course No	Course Title	Credits
PHAR 4XXG	APPE V	
PHAR 4XXG	APPE VI	
	Total Credits	

#### TERM 4 (SPRING)

ourse No Cou	urse Title	Credits
HAR 4XXG	PE VII	4
HAR 4XXG APP	PE VIII	4
Tota	al Credits	8

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\*Advanced Pharmacy Practice Experience (APPE)

# COURSE DESCRIPTIONS

#### <u>School of Pharmacy – Doctor of Pharmacy (PharmD) – Georgia Campus</u>

#### DIDACTIC COURSES

# INDP 100G - Interprofessional Approach to Caring for the Community 0 credits per term for 3 terms

In this course, students from various health care professional programs work together to discuss and investigate approaches to solving health care-related issues as an interprofessional, collaborative team. The course consists of six 2-hour sessions spread over a single academic year. Students meet in the lecture hall, as well as in small groups with a faculty facilitator to discuss issues including medical ethics, team-work and leadership in health care delivery, cultural/religious competency, medical errors and prescription and non-prescription drug abuse and opioid addiction.

# PHAR 011G, 012G, 013G, 021G, 022G, 023G, 031G, 032G, 033G – Portfolio 0 credits

Students are required to maintain a current portfolio throughout their tenure in the School of Pharmacy. The portfolio will be assessed at the end of each term and must be complete with no expired or missing requirements for the student to progress to the next term. Examples of requirements that must be current include a valid State of Georgia Pharmacy Intern license, Basic Life Support certification, required immunizations, health insurance, student self-assessment, essays, curriculum vita, HIPAA and OSHA training as well as specific requirements as stated in the course syllabus each term. Some requirements may be specific to assigned experiential sites. Course is Pass/No Pass.

## PHAR 110G – Anatomy

#### 2 credits

This course is the first of a three course sequence 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 cellular structure and cell function 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, respiratory, digestive, urinary, and reproductive systems.

#### PHAR 112G – Anatomy Laboratory

#### 1 credit

This course is the laboratory component of Anatomy 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

#### 4 credits

This course is the second in a three-course sequence that covers human anatomy,

physiology and pathophysiology, this course begins with an outline of cellular physiology and a discussion of action potentials and excitation-contraction coupling. This is followed by an introduction to the concept of pathophysiology and a discussion of the basic principles of how stress or injury affects physiological function at the cellular level and thus causes disease. A discussion of genetics and inheritable diseases follows. The remainder of the course encompasses the physiology and pathophysiology of the pulmonary, hematological, cardiovascular and renal systems. An emphasis is placed throughout the course on understanding normal physiological processes and how disease perturbs such processes. Commonly used clinical laboratory values, and their application to diagnosis and monitoring of disease, are introduced as appropriate.

#### PHAR 114G – Physiology and Pathophysiology II 4 credits

#### This course is 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 neurological, gastrointestinal, endocrine, skeletal and integumentary systems. An emphasis is placed throughout the course on understanding normal physiological processes and how disease perturbs such processes. Commonly used clinical laboratory values, and their application to diagnosis and monitoring of disease, are introduced as appropriate.

# PHAR 116G – Introduction to Drugs

#### 3 credits

This course is an introduction to commonly used medications and medical terminology. Representative drugs from the major classes will be presented to illustrate the importance of pharmacy-specific information such as drug names, dosage forms, indications, basic mechanism of action, major drug interactions, adverse effects, black box warnings, contraindications and patient information. In addition, medical abbreviations and drug terminology will be presented.

#### PHAR 119G – Pharmacy Communications

#### 2 credits

This course is 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 134G – Biostatistics

#### 3 credits

Basic statistical concepts important to the practice of pharmacy and medicine will be introduced. Students will be exposed to basic descriptive statistics related to presentation, organization, and summarization of data. The course will also cover basic research design.

#### PHAR 141G – Pharmaceutics

#### 3 credits

This course studies 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 will be presented. Legal and professional issues will also be presented.

#### PHAR 145G – Pharmaceutical Calculations

#### 2 credits

This is 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 ranging from oral, topical, optic, ophthalmic and finally to parenteral products. Determination of drug concentration, toxicity, equivalents, potency, proof, density and specific gravity is also addressed.

#### PHAR 150G – Biochemistry

#### 3 credits

This course is 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 introduce fundamental skills related to the practice of pharmacy in a variety of settings. Students will be presented with opportunities to utilize contemporary computerized systems to fill inpatient and outpatient prescriptions, prepare sterile products using laminar flow hoods, use automated dispensing stations and become familiar with workflow issues encompassing both community and institutional pharmacy. Skill in common assessment techniques, such as measurement of blood pressure, pulse, blood glucose and peak flow meters, will be developed as well as training in pharmacist-administered immunizations using the APhA Pharmacy-Based Immunization Delivery certificate program. Dispensing, counseling and drug information skills will also be developed.

#### PHAR 162G – Pharmaceutics Laboratory

#### 1 credit

In this course 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 165G – Drug Information and Introduction to Evidence-Based Medicine 3 credits

This course prepares students to acquire and develop both the knowledge and skills for evidence-based medicine (EBM). During this course students will utilize biostatistics and drug information concepts and skills to evaluate scientific literature. Students will be taught how to acquire and critically appraise the scientific evidence for its validity and usefulness.

# PHAR 167G – Over the Counter 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

This is 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, and 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 210G – 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 the pharmacist's role in patient care. Problems with the system will be covered along with approaches 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 currently debatable issues surrounding health care.

#### 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, etc. This course begins with introductory material from each of the three areas that will aid in better understanding as more detail is added subsequently throughout the course. Finally, the therapeutics of cardiovascular disorders, as well as the medicinal chemistry and pharmacology of the drugs used to treat these conditions, will be presented.

# PHAR 212G – Integrated Therapeutics II

#### 4 credits

This is the second 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, etc. This course will finish cardiovascular disorders and then cover the therapeutics of hematological, renal, respiratory and the beginning of the central nervous system disorders, as well as the medicinal chemistry and pharmacology of the drugs used to treat these conditions.

#### PHAR 213G – Integrated Therapeutics III

#### 4 credits

This is the third 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, etc. This course will finish central nervous system disorders and then cover the therapeutics of pain management, as well as the medicinal chemistry and pharmacology of the drugs used to treat these conditions.

#### PHAR 214G, 215G, 216G – Case Studies

#### 1 credit each term Second Year

This course is designed to increase competence in developing a well-designed and patientoriented pharmaceutical care plan. The pharmaceutical care plan is used to identify, prevent and resolve actual or potential drug-related problems. This results in improved clinical outcomes, patient satisfaction and quality of life as well as a reduction in drugrelated morbidity and mortality.

# 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 228 G – 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 and marketing.

#### 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.

#### 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 bacteria, 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 medication therapy management, triage and patient referral skills. The fundamentals of clinically relevant patient data, patient and drug histories, screening methods, laboratory values, and diagnostic tests will be used to triage, evaluate and manage common disease states. The value of pharmaceutical care plans, counseling, and identification of therapeutic problems will also be emphasized.

#### PHAR 256G – Pharmacy Practice Laboratory II

#### 1 credit

This laboratory will familiarize the student with basic patient assessment including the practice of inspection, palpation, percussion and auscultation. These fundamental physical assessments will be incorporated into patient evaluations while using clinically relevant patient data, drug histories/interviews, laboratory values, and point-of-care diagnostic tests. Principles of medication therapy management (MTM) will be used to develop pharmaceutical care plans with acting patients who will then be counseled.

# PHAR 281G – Dietary Supplements

#### 2 credits

This course will provide an evidence-based discussion of dietary supplements as described in the Dietary Supplement and Health Education Act (DSHEA). A general discussion of the history, regulatory background and terminology will be followed by a systems-based approach to the discussion of individual supplements. The mechanism of action, indications and adverse effects of each supplement will be discussed as well as identification of the active moiety, for natural substances. Emphasis will be placed on patient counseling as applied to proper use of the supplement and the potential for interactions with prescription and nonprescription drugs.

#### PHAR 299G – Comprehensive Examination Second Year 0 credits

A comprehensive examination will be given at the end of the second year that will assess knowledge and skills acquired in the first two years. Students must pass this examination to progress to the third professional year.

#### PHAR 311G – Integrated Therapeutics IV

#### 4 credits

This is the fourth 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, etc. This course will cover the therapeutics of the endocrine and gastrointestinal systems, as well as the medicinal chemistry and pharmacology of the drugs used to treat these conditions.

#### PHAR 312G – Integrated Therapeutics V

#### 4 credits

This is the fifth 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, etc. This course will cover the therapeutics of immunological, rheumatological and dermatological conditions as well as oncology, including the medicinal chemistry and pharmacology of the drugs used to treat these conditions.

# PHAR 314G – Clinical Pharmacy

#### 3 credits

This course covers the practice of pharmacy in health care systems such as hospital, home care, managed care, hospice and palliative care as well as ambulatory and long-term care. Discussions will focus on the types of patients treated, models of practice and practice standards as well as the various accreditation agencies, government regulation, and institutional policies and procedures. Additional topics may also include the following:

include parenteral and enteral nutrition, Pharmacy and Therapeutic (P&T) Committees, investigational drug use, medication reconciliation, ethics boards, and code response involvement as well as technological advances and automation.

# PHAR 315G, 316G, 317G – Case Studies

#### 1 credit each term Third Year

This course is designed to increase competence in developing a well-designed and patientoriented pharmaceutical care plan. The pharmaceutical care plan is used to identify, prevent and resolve actual or potential drug-related problems. This results in improved clinical outcomes, patient satisfaction and quality of life as well as a reduction in drugrelated morbidity and mortality.

#### PHAR 321G – Pharmacy Practice Laboratory III 1 credit

This laboratory course highlights the practice of pharmacy in health care systems while also re-emphasizing a variety of community pharmacy practice skills. Students will train in simulated outpatient and inpatient hospital settings, as well as community settings, providing dispensing and drug information functions, practice simulated code response, preparing drug monographs, perform medication reconciliation, as well as providing discharge counseling. Students will also prepare sterile and biohazardous products utilizing the latest technology for maintaining sterility and providing human safety during product preparation. Training in the preparation of intravenous admixtures such as antimicrobials, chemotherapy and parenteral nutrition will be provided based on USP 797 regulations. Special procedures, quality control, use of available references, appropriate calculations, and federal and state regulations will also be addressed.

# PHAR 323G – Drug Literature Evaluation 2 credits

The purpose of this course is to allow the student to apply his/her knowledge of bio statistical and clinical principles, as well as drug information skills in order to interpret the medical literature. A strong foundation in bio statistical analyses will be required for successful completion of this course. Students will be expected to read, interpret, analyze and synthesize information published in medical and scientific literature. Examinations will be based on materials from didactic lectures and assigned readings and students will be expected to interpret and analyze data presented in published articles and be able to draw objective and rational conclusions from the literature. Interpretation of medical research is a cornerstone of clinical pharmacy practice, and will serve as an important component of their therapeutics courses and experiential rotations.

#### PHAR 346G – Pharmacoeconomics

#### 3 credits

This course will introduce students to theory, methods and applications of epidemiology and pharmacoeconomics. In the epidemiology part, students will learn surveillance, epidemiological investigation, study design, confounding, bias, limitations of epidemiological studies, and calculation and interpretation of epidemiological results. In the pharmacoeconomics part, students will learn cost estimation, outcomes measurement, quality of life, different types of pharmacoeconomic study, decision tree analysis, simulation, modeling, and application of pharmacoeconomics in decision making. Students will also read and evaluate published studies in epidemiology and pharmacoeconomics.

#### PHAR 351G – Toxicology 3 credits

A discussion of the general principles of toxicology is followed by general principles of management of poisoning. The students are familiarized with the purpose and functioning of poison control centers, with emphasis on the role of pharmacists. The top 5 categories of non-drug and drug-induced poisonings in United Stated based on the most recent AAPCC data report are identified. These toxicities, prevention, assessment, and their antidotes/treatment approaches are then discussed. Antidotes and treatments that are covered appear in blue alongside the relevant topics. Finally, bioterrorism agents and disaster preparedness topics 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 health care delivery in general, are examined.

#### PHAR 375G – Capstone

#### 4 credits

The course is designed to provide students 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

The Seminar course allows students to demonstrate pharmacotherapy knowledge gained in Integrated Therapeutics I - V as well as communication skills by presenting patient cases to their peers and faculty. Through attendance of their peers' presentations, students have the opportunity to compose and answer questions to improve their knowledge base and critical thinking skills. Seminar aims to help students strengthen their clinical knowledge, as well as improve problem-solving and team dynamics skills

# PHAR 399G – Comprehensive Examination Third Year 0 credits

A comprehensive examination will be given at the end of the third professional year that will assess knowledge and skills acquired in the first three years of education at PCOM School of Pharmacy. Students must pass this examination to progress to the fourth professional year. The examinations include a comprehensive multiple-choice exam and a short answer calculation exam.

#### THIRD YEAR DIDACTIC ELECTIVES

Not all electives are offered every year

#### PHAR 311EG – Illicit Drugs

#### 1 credit

This course will introduce the student to illicit drugs of abuse which include cannabinoids (marijuana), stimulants (methamphetamines and amphetamines), cocaine, depressants (short-acting barbiturates, benzodiazepines), hallucinogens (LSD, psilocybin, PCP),

narcotics, designer drugs (bath salts, GHB and MDMA) and volatile gases. The course will describe common street names of such drugs, their pharmacology, adverse effect profiles and methods of detection in the body. The course will also describe the concepts of physical and psychological dependence and describe some of the available treatments for these patients.

#### PHAR 312EG – Psychiatry

#### 1 credit

This course is designed to expand upon the knowledge gained in Integrated Therapeutics II and III. This course will also introduce new topics into the curriculum particularly substance abuse and its treatment and the use of novel illicit drugs. Students will be able to apply the knowledge learned via the lecture through group cases conducted at the end of each lecture as well as movie/topic discussions pertaining to the lecture material.

#### PHAR 314EG - Pharmacogenomics

#### 1 credit

This course will focus on individual variations in the genetic make-up that influence the therapeutic efficacy and/or adverse effects of drugs. The primary emphasis will be on drugs (such as warfarin and clopidogrel) where the variations are clinically relevant and their genetic basis is largely understood.

# PHAR 315EG - Case Studies in Critical Care and Nutrition Support 1 credit

This course is designed to expose the student to the pharmacotherapeutic challenges most commonly encountered in the critical care setting and to expand the student's knowledge base regarding the role of the pharmacist in the critical care setting. The course is designed in a patient case format in order to discuss the medications, disease states and nutrition support challenges that are commonly seen in the critically ill patient. The patient case format will also serve to strengthen students' written and verbal presentation skills.

# PHAR 316EG - Pharmaceutical Marketing and Industry in the Information Age 1 credit

In the current information age, pharmaceutical marketing is vastly different given the increasing presence of the internet and social media, company consolidation, and regulatory changes throughout the last decade. Not only have the number of blockbuster medications produced by pharma decreased, but so has the presence of directed sales representatives in physician offices. Therefore, pharmaceutical and health care industry marketers must work harder and smarter to maximize every product's or service's potential. This course will examine the current pharmaceutical marketing environment from both an academic and practical perspective and give students the opportunity to gain a deeper understanding of the business and regulatory aspects of the pharmaceutical manufacturing industry.

#### PHAR 321EG – Self-Care

#### 1 credit

This course is designed to provide the student with an understanding of the pharmacist's role in empowering patients' self-care. The students will expand their abilities learned in the OTC course in identifying common medical conditions that are appropriate for self-care.

## PHAR 322EG – Seminars in Cardiology

#### 1 credit

This course is designed to focus on important clinical trials involving cardiovascular pharmacotherapy. The overall objective of the course is to emphasize the need for the student to provide clinical evidence to support drug therapy recommendations in the treatment of cardiovascular diseases during their clinical clerkships and future practice. By the conclusion of this course, the student will be able to cite data from clinical trials to justify his/her specific drug therapy recommendations for a variety of cardiovascular diseases such as ischemic heart disease including unstable angina, chronic stable angina, and acute coronary syndrome, heart failure, atrial fibrillation, hypertension and dyslipidemia.

# PHAR 323EG – Community Pharmacy Ownership

#### 1 credit

A course designed to provide the student with the necessary information to become a community pharmacy owner either through the establishment of a new pharmacy or the purchase of an existing pharmacy. The student will learn layout and design, location analysis, evaluation of third-party plans, and promotional offerings, as well as the financial aspects of the development and implementation of value-added clinical services in the community setting.

#### PHAR 324EG – Topics in Men's Health

#### 1 credit

This elective course is designed to incorporate pharmacotherapeutic principles in the management of various disease states related to men's health. This course will also integrate the fundamentals of drug literature evaluation as each lecture will have required reading from the medical literature. Individual and group reflection will be incorporated as a learning method in this course. A solid understanding of the pathophysiology and pharmacotherapy of certain disease states is fundamental to successful mastery of this course.

#### PHAR 371EG – Pediatrics

#### 1 credit

This course provides an introduction to the concepts of pharmacy practice as it relates to common pharmacotherapy issues affecting the pediatric population for pharmacists. The role of OTC and prescription medications in the management of common pediatric problems will be covered. Areas of interest for this course will include developmental pharmacokinetics, drug dosing and delivery, nutrition, and poisoning and poison prevention, as well as unique disease management in this patient population.

#### PHAR 372EG – Issues in Public Health

#### 1 credit

This course is designed to provide the student with an understanding of the public health programs and the role of the pharmacist in these programs. The students will also be introduced to contemporary issues that surround these public health programs and potential future contributions of the pharmacist in these programs.

#### PHAR 374EG – Biologics and Biopharmaceuticals 1 credit

Biologics are defined as substances derived from or made with the aid of living organisms, which include vaccines, antitoxins, serums, blood, blood products, therapeutic protein

drugs derived from natural sources (e.g., anti-thrombin III), or biotechnology (e.g., recombinant proteins), or gene or somatic cell therapies. Biologics are an important therapeutic option for treating patients. This course offers students an opportunity to survey the most important aspects of biologics and biopharmaceuticals. Content will include an introduction to biotechnology, vaccines, DNA- and RNA-based therapy, stem cell therapy, blood products, recombinant proteins, and monoclonal antibodies.

#### PHAR 375EG – Geriatrics

#### 1 credit

The purpose of this course is to expose students to the key concepts in geriatric assessment and pharmacotherapy. The course is designed to focus on important clinical concepts in geriatrics. There will be an emphasis on the physiology of aging, appropriate pharmacotherapy, complexity of regimens, changes in cognition, and the challenges of providing safe medication management of the elderly. The course will include, but is not limited to, Alzheimer's disease and other dementias, Parkinson's disease, depression, anxiety, behavioral disorders, gastrointestinal disorders, changes in hepatic metabolism, renal clearance and volumes of distribution and other topics.

#### PHAR 376EG – Oncology

#### 1 credit

This elective covers preparation of intravenous chemotherapy, oral chemotherapy and long-term effects. The student will have an opportunity to learn about various cancers that were not previously covered along with oncology nutrition. The student will also have an opportunity to prepare a counseling packet for chemotherapy patients which also assesses insurance issues and a chance to complete an oncology volunteer activity.

#### PHAR 377EG – Ambulatory Care

#### 1 credit

This course is designed to expose the student to the pharmacotherapeutic challenges most commonly encountered in the ambulatory care setting and to expand the student's knowledge base regarding the role of the pharmacist in the ambulatory care setting. The course is designed in a patient case format in to discuss the medication therapy management and disease state management challenges commonly seen in an ambulatory care setting. The patient case format will also serve to strengthen students' written and verbal presentation skills.

#### EXPERIENTIAL COURSES

Introductory Pharmacy Practice Experience (IPPE) Courses

# PHAR 171G –Introductory Clinical Services I

#### 1 credit

This Introductory Clinical Services Introductory Pharmacy Practice Experience (IPPE) will continue the development from the students' first and second year IPPEs. It offers the additional exposure of students to Introductory Clinical Services in the healthcare system setting with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care for the rest of their academic and professional careers. Students will spend one week, 44 hours in a healthcare system setting exposing them to Introductory Clinical Services I. 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 172G – IPPE Community I

#### 1 credit

This Introductory Pharmacy Practice Experience (IPPE) is designed as an introduction to the profession of pharmacy. It offers the initial exposure of students to community pharmacy workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care for the rest of their academic and professional careers. Students will spend four hours a week for twelve weeks in a community pharmacy setting, for a total of 48 hours.

#### PHAR 261G – IPPE Community II

#### 1 credit

The community experience will continue the development from students' first year Introductory Pharmacy Practice Experiences with development of skills in patient interviews, and patient profiles/charts,. 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 262G –Introductory Clinical Services II

#### 1 credit

This IPPE provides direct practical experience to the student in a healthcare system setting, specifically in a center providing ambulatory care. The 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 skills developed during this course 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 Community III

#### 1 credit

IPPE Community III will continue the development from the first and second year Introductory Pharmacy Practice Experiences with the development of skills and knowledge needed for accurate prescription dispensing including an emphasis on preventing medication errors. 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

#### PHAR 410G – Advanced Community

#### 4 credits

This Advanced Pharmacy Practice Experience (APPE) is designed for the students to obtain supervised professional experience as a community pharmacist. This advanced rotation exposes students to community pharmacy workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient- centered care.

#### PHAR 420G – Advanced Health System Pharmacy 4 credits

This Advanced Pharmacy Practice Experience (APPE) is designed for the students to obtain supervised professional experience in the functions of a staff pharmacist in an

institutional pharmacy. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 430G – Advanced Ambulatory Care 4 credits

This Advanced Pharmacy Practice Experience (APPE) is designed for the students to obtain supervised professional experience in the functions of a clinical pharmacist in the ambulatory care practice setting. Ambulatory care pharmacy is defined as "direct pharmaceutical care services provided to patients in an outpatient environment, exclusive of dispensing services." This advanced rotation exposes students to ambulatory care workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 440G – Advanced Community Management 4 credits

This Advanced Pharmacy Practice Experience (APPE) is designed for the students to obtain supervised professional experience in the managerial functions of a community pharmacist. This advanced rotation exposes students to leadership and managerial skills necessary in the community pharmacy workplace. This course helps students develop the requisite knowledge necessary to understand inventory control, profit and loss statements and human resource issues.

# PHAR 450G – Advanced Inpatient / Acute Care General Medicine 4 credits

This Advanced Pharmacy Practice Experience (APPE) is designed for the students to obtain supervised professional experience in the functions of a clinical pharmacist in the acute care practice setting. Clinical intervention and the steps necessary to effectively execute those interventions will be a primary focus of this rotation. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient- centered care

#### ELECTIVE APPEs

Select any 3

The following list contains examples of elective APPE sites that may 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 his/her APPE requirements.

#### PHAR 501G – Academia

#### 4 credits

An elective experience designed to stimulate the interest of pharmacy students in academia and provide the student with an understanding of the functions and processes of teaching, service and scholarship. Students may be exposed to situations that will increase their understanding of the various responsibilities of a full-time faculty position in pharmacy education.

## PHAR 502G – Administrative Hospital

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the administrative duties of healthcare systems. Depending on the site, students may be exposed to situations that will increase their knowledge in the area of administrative, behavioral, economic and legal sciences. The role of the pharmacy director/manager will be a primary emphasis of this experience.

#### PHAR 503G – Administrative Community

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the administrative duties of community pharmacy. Depending on the site, students may be exposed to situations that will increase their knowledge in administrative, behavioral, economic and legal sciences. The role of the manager will be a primary emphasis of this experience.

#### PHAR 504G – Associations

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the management of national, regional or state pharmacy organizations. Depending on the site, the students may be exposed to situations that will increase their knowledge and understanding of the purpose, roles and responsibilities of pharmacy associations in the profession.

#### PHAR 505G – Industry

#### 4 credits

An elective practice experience designed to enable the student to acquire general knowledge and high level of exposure to the pharmaceutical industry, with exposure to a variety of areas within the pharmaceutical industry.

#### PHAR 510G – Community Pharmacy Ownership

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic fundamentals of owning and running an independent community pharmacy. This advanced rotation exposes students to community pharmacy workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

## PHAR 511G – Pharmacy Benefit Manager

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic knowledge and a high level of exposure to a variety of activities conducted by a Pharmacy Benefit Manager. A PBM is an organization that manages the pharmaceutical benefits for managed care organizations, other medical providers or employers. Depending on the site, the student may be exposed to numerous activities to promote managed care principles, including benefit plan design, creation/administration of retail and mail service networks, claims processing, drug utilization review, formulary management, generic dispensing, prior authorization and/or disease and health management.

#### PHAR 512G – Informatics 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the history, language and concepts of information technology in the field of pharmacy. Depending on the site, students may be exposed to database management, automation and robotics, electronic prescribing, and health records.

#### PHAR 513G – Pharmacoeconomics

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic understanding of health outcomes (clinical, economic, humanistic) focusing on the science that compares the value of one pharmaceutical product with another and how those principles contribute to health care quality.

#### PHAR 514G – Phmacokinetics

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge in the functioning of an established clinical pharmacokinetics practice and information on methods for establishing such a service. Expertise in calculations is expected from previous coursework. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 515G – Cardiology

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the pharmacotherapy of various cardiovascular disease states in a diverse patient population. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 516G – Nephrology

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the pharmacotherapy of a patient with various diseases of the kidney. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient- centered care.

#### PHAR 520G – Compounding

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the rationale for and the various techniques used in the extemporaneous compounding of pharmaceutical products. This advanced rotation exposes students to community pharmacy workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 521G – Drug Information

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the practice of basic drug information. Depending on the site, the

students may be exposed to activities such as preparing formulary evaluations, writing pharmacy newsletters, working on special interest projects and enhancing their verbal and written communication skills.

#### PHAR 522G – Medication Reconciliation 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the practice of medication reconciliation. Depending on the site, the student will be exposed to the process of comparing a patient's medication orders to all of the medications that the patient has been taking. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 523G – Medication Therapy Management

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the pharmacist's role in providing Medication Therapy Management services. Depending on the site, the student will be trained to evaluate a patient's medication therapy, including drug interactions, duplications or omission of therapy. This advanced rotation exposes students to community pharmacy workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 530G – Critical Care

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the pharmacotherapy of a critically ill patient in a hospital setting. The student will be exposed to various medication management strategies of various critical conditions.

## PHAR 533G – Long Term Care

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding treatment of geriatric patients in a long term care facility. Depending on the site, students may be exposed to situations that will increase their ability to demonstrate empathy for the elderly and develop pharmaceutical care plans for various chronic disease states with consideration of various pharmacokinetic properties, dosing principles, and therapeutic drug monitoring parameters of geriatric patients in long term care facilities. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 534G – Managed Care

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the practice of clinical pharmacy in the managed care setting. Students will be exposed to pharmacy administration issues such as formulary development and management, therapeutic class reviews, pharmacoeconomics analysis, communication with patients, providers, and employer groups, counseling and participation in prior authorization process and other third-party reimbursement issues.

#### PHAR 540G – Diabetes 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the pharmacotherapy of diabetes. This advanced rotation exposes students to ambulatory care workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 541G – Infectious Disease

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding the pharmacotherapy of patients with various infectious diseases. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient- centered care.

#### PHAR 542G – Neonatology

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic pharmacotherapy of neonates in the neonatal intensive care unit (NICU) setting. Depending on the site, students may be exposed to different pharmacokinetic properties, dosing principles and therapeutic drug monitoring in neonates. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 543G – Nuclear

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic pharmaceutical care, radiopharmaceutical compounding, quality assurance, health physics and regulatory compliance.

#### PHAR 544G – Nutritional Support

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic nutritional principles, nutritional assessment, and management of the patient requiring enteral and/or total parenteral nutrition support. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 545G – Oncology

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic clinical oncology pharmacy practice. Depending on the site, students may be exposed to situations that will enhance their understanding of pharmaceutical support to the inpatient/outpatient oncology service, including staging, treatment, dosing, monitoring, and supportive care issues. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 546G – Pediatrics 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic pharmacotherapy of pediatric patients with common childhood acute and chronic illnesses. Depending on the site, students may be exposed to different pharmacokinetic properties, dosing principles and therapeutic drug monitoring in children. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 548G – Psychiatry

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic clinical pharmacotherapy of various psychiatric disorders of children, adolescents and/or adults. This advanced rotation exposes students to health care system workplaces with diverse patient populations, and helps students develop the requisite knowledge, skills, attitudes, and values for the provision of patient-centered care.

#### PHAR 591G – Research

#### 4 credits

An elective practice experience designed to enable the student to acquire skills and knowledge regarding basic pharmacy-related research. Depending on the site, the student may observe and participate in various stages of ongoing research project(s), including conducting experiments, analyzing data.

## PROGRAM OF STUDY

## <u>Physician Assistant Studies – Master of Science (MS)</u> – Philadelphia and Georgia Campuses

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.

## Graduation Requirements

Each candidate for the degree of Master of Science) must achieve a GPA of 3.0 to graduate from the program and satisfactorily completed all degree requirements.

Students following a cooperative pathway matriculate into a physician assistant pre-professional program, leading to a bachelor of science degree from a partner undergraduate institution. Students who meet progression standards of the undergraduate institution and the PCOM graduate program may then progress to the professional phase, leading to a Master of Science from PCOM. For requirements and details on each program, please contact the respective undergraduate institution.

## COURSE SEQUENCE

## <u>Physician Assistant Studies – Master of Science (MS)</u> <u>– Philadelphia and Georgia Campuses</u>

## First Year

TERM 1 (SUMME	R)	
Course No	Course Title	Credits
PHYA 502 /502G .	Human Gross Anatomy	
PHYA 519/519G	Human Physiology	
	Total Credits	

## TERM 2 (FALL)

Course No	Course Title	Credits
INDP 100G	.Interprof Approach Caring for Community	0
PHYA 501/ 501G	.Pharmacologic Concepts and Pharmacotherapeutics	2
PHYA 503/ 503G	.History Taking and Physical Examination	10
PHYA 514/514G	.Professional Practice Issues and Health Policy	2
PHYA 531/531G	.Community Health Service	2
PHYA 534/534G	.Introduction to Pathogenesis and Clinical Genetics	1
PHYA 542/542G	.Research Methods	1
	Total Credits	18

## TERM 3 (WINTER)

Course No	Course Title	Credits
INDP 100G	Interprof Approach Caring for Community	0
PHYA 510 /510G	. Clinical Medicine I	10
PHYA 515 /515G		1
PHYA 520 /520G	Pharmacology I	2
	. Pathology I	
	.Evidence-Based Medicine	
	Total Credits	17

## TERM 4 (SPRING)

Course No	Course Title	Credits
INDP 100G	.Interprof Approach Caring for Community	1
PHYA 511 /511G	.Clinical Medicine II	10
PHYA 521 /521G	.Pharmacology II	2
PHYA 536 /536G	.Pathology II	2
PHYA 549 /549G	.Radiology for the Physician Assistant	2
	Total Credits	17

## <u>Physician Assistant Studies – Master of Science (MS)</u> <u>– Philadelphia and Georgia Campuses</u>

## Second Year

IERM I (SUMMER	)	
Course No	Course Title	Credits
PHYA 512 /512G	.Clinical Medicine III	10
PHYA 522 /522G	.Pharmacology III	1
PHYA 530 /530G	.Behavioral Medicine and Psychiatry	1
	.Pathology III	
	Total Credits	

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

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

Course No	Course Thie	Creatts
PHYA 550 /550G	Family Medicine Preceptorship	10
PHYA 551 /551G	Internal Medicine Preceptorship	10
PHYA 553 /553G	Emergency Medicine Preceptorship	10
PHYA 554 /554G	Gynecology/Prenatal Preceptorship	10
PHYA 555/555G .	General Surgery Preceptorship	10
PHYA 556 /556G	Behavioral Medicine Preceptorship	10
PHYA 557 /557G	Pediatrics Preceptorship	
	Total Credits	

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Total credits required for	degree completion	156
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## COURSE DESCRIPTIONS

## <u>Master of Science – Physician Assistant Studies (MS)</u> <u>– Philadelphia Campus</u>

# INDP 100G – Interprofessional Approach to Caring for the Community 0 credits Fall and Winter with

## 1 credit Spring term

In this course, students from various health care professional programs work together to discuss and investigate approaches to solving health care-related issues as an interprofessional, collaborative team. The course consists of six 2-hour sessions spread over a single academic year. Students meet in the lecture hall, as well as in small groups with a faculty facilitator to discuss issues including medical ethics, team-work and leadership in health care delivery, cultural/religious competency, medical errors and prescription and non-prescription drug abuse and opioid addiction.

# PHYA 501/501G – Pharmacologic 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 502/502G – 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.

# PHYA 503 /503G– 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. Digital recording capabilities will allow students to review their clinical performance with faculty. Students are certified in Basic Life Support.

## PHYA 510 /510G– 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 problemoriented 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. Health promotion, disease prevention, medical nutrition, the genetic basis of disease, rehabilitative care, and patient education relevant to each disease is also covered. Students demonstrate knowledge of certain medical instruments and proficiency in selected procedures. Students will orally present patient data as well as document patient information through the use of our standardized patient lab, clinical seminars and a clinical skills lab. The specific specialty areas and body-systems covered include infectious diseases, dermatology, endocrinology, otorhinolaryngology, gastroenterology, hematology, oncology, introduction to ophthalmology and pulmonology.

#### PHYA 511/511G – 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 problemoriented 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. Health promotion, disease prevention, medical nutrition, the genetic basis of disease, rehabilitative care, and patient education relevant to each disease is also covered. Students demonstrate knowledge of certain medical instruments and proficiency in selected procedures. Students will orally present patient data as well as document patient information through the use of our standardized patient lab, clinical seminars and a clinical skills lab. The specific specialty areas and body-systems covered include cardiology, urology, neurology, nephrology, orthopedics and rheumatology. Students are certified in Advanced Cardiac Life Support.

#### PHYA 512/512G – Clinical Medicine III 10 credits

This course is the third of a sequence of three courses that is 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 problemoriented 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. Health promotion, disease prevention, medical nutrition, the genetic basis of disease, rehabilitative care, and patient education relevant to each disease is also covered. Students demonstrate knowledge of certain medical instruments and proficiency in selected procedures. Students will orally present patient data as well as document patient information through the use of our standardized patient lab, clinical seminars and a clinical skills lab. The specific specialty areas and bodysystems covered include obstetrics and gynecology, geriatrics, surgery, emergency medicine and pediatrics.

# PHYA 514 /514G– Professional Practice Issues and Health Policy 2 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. 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 working in interprofessional patient-centered teams, 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 /515G– 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, death/dying decisions, commitment to patient welfare, respect for self and others, impact of genetic technology. This course also covers topics of consent to treat, privacy and confidentiality issues, organ donation, and hospice and palliative care. In addition, impaired provider identification and referral resources are discussed.

## PHYA 519/519G – 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. An introductory self- study medical terminology section will also be presented.

#### PHYA 520/520G – 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 providing the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy. Lectures 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, gastroenterology, endocrinology, hematology and pulmonology.

## PHYA 521/521G – 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 providing the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy. Lectures 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, oncology, cardiology and rheumatology.

## PHYA 522 /522G – 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 providing the students with an introduction to clinical therapeutics. Clinical therapeutics incorporates the physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy. Lectures 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: psychiatry, ophthalmology and otorhinolaryngology.

# PHYA 530 /530G– Behavioral Medicine and Psychiatry 1 credit

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.

## PHYA 531/531G – Community Health Service

## 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 534 /534G – Introduction to Pathogenesis and Clinical Genetics 1 credit

This course will lay a foundation in the pathogenesis of disease, which is the foundation of critical thinking in clinical practice. Topics to be covered include cellular injury, death and repair, inflammation, immunodeficiencies, and neoplastic growth. Additionally, the PA student will be introduced 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, presymptomatic 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.

#### PHYA 535 /535G– 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. Lectures are focused on the disease processes of the following organ systems: respiratory, gastroenterologic, hematologic, dermatologic, endocrinologic, gastroenterologic and otorhinolaryngologic.

## PHYA 536 /536G- 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 the following organ systems: renal, urologic, cardiologic, neurologic, rheumatologic and orthopedic.

## PHYA 537 /537G– Pathology III

## 1 credit

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 forensic medicine and include topics such as cause and manner of death, child abuse, postmortem changes, asphyxiation, trauma and drug abuse.

## PHYA 542 /542G- Research Methods

## 1 credit

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 543/543G – 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 /549G– 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 /550G– Family Medicine Preceptorship

## 10 credits

This six-week preceptorship is intended to augment and strengthen the student's skills in developing a comprehensive database and a systematic 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 /551G– 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 systematic approach to common internal 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 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 /553G– 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 systematic 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 /554G– 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 systematic 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 555/555G – General Surgery Preceptorship

## 10 credits

This six-week surgical preceptorship augments and strengthens student skills in developing a comprehensive database and a systematic 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 556/556G – Behavioral Medicine 10 credits

This six-week behavioral medicine preceptorship augments and strengthens student skills in developing a comprehensive database and a systematic approach to common problems in behavioral medicine. It 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. 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 /557G– 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 systematic 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 /558G– 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 /560G- Research Practicum

## 2 credits

Senior PA students, using the knowledge acquired in prior related courses, are required to ask a clinically relevant question in a clinical discipline seen in PA practice. A subsequent search and interpretation of the literature results in the culmination of a year-long project conducting, writing and presenting a selective EBM review on chosen topics of interest.

# PHYA 562/562G – Comprehensive Review 3 credits

This course is intended to review and assess the student's knowledge of core competencies. On Senior Days, students engage in focused activities designed to prepare them for the preceptorship they are about to begin. It also 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.

## PROGRAMS OF STUDY

## Doctoral and Graduate Programs – Philadelphia Campus

## Department of Psychology

## 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.

## Respecialization in Clinical Psychology

Respecialization candidates who have already completed a doctoral degree in psychology may apply for admission to respecialize in Clinical Psychology. The criteria for acceptance to respecialize in Clinical Psychology are the same criteria required of applicants requesting admission to the Clinical Psychology doctoral program. The timeline to complete the respecialization program as well as the number of credits required will be determined upon a full application review.

## 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.

## COURSE SEQUENCE

## Clinical Psychology (PsyD) – Philadelphia Campus

# First Year

TERM 1 (FALL)

Students must register for the Doctoral Writing Skills Seminar in the Fall, Winter and Spring terms of their first year. No course credit is given. A \$500 fee is assessed for each term. Following the first term, and at the discretion of the Program Director, students may have the option to waive this seminar for the remaining terms.

Course No	Course Title	Credits
CPSY 102	.Doctoral Writing Skills Seminar	not for credit
CPSY 601	. Learning Theories	3
CPSY 603	. Behavioral Medicine	3
CPSY 622	. Ethics in Psychology	3
	. Professional Development Seminar	
	Total Credits	10

## TERM 2 (WINTER)

Course No	Course Title	Credits
CPSY 103	Doctoral Writing Skills Seminar	t for credit
CPSY 608	Social Psychology	3
CPSY 616	Lifespan Development	3
	Research I: Research Design and Methodology	
CPSY 695E	Professional Development Seminar	1
	Total Credits	10

## TERM 3 (SPRING)

Course No	Course Title	Credits
CPSY 104	. Doctoral Writing Skills Seminar	ot for credit
CPSY 620	. Psychopathology	3
CPSY 623	. Human Diversity: Multiculturalism and Individual Diffe	erences3
CPSY 625	. Research II: Psychometrics and Univariate/	
	Multivariate Statistics and Lab	4
CPSY 695E	. Professional Development Seminar	1
	Total Credits	11
Total credits for first year		

## Second Year

TERM 1 (SUMMER)		
Course No	Course Title	Credits
CPSY 605	History and Systems of Psychology	
CPSY 607	Cognitive/Affective Bases of Behavior	
	Total Credits	6

TERM 2 (FALL)		
Course No	Course Title	Credits
CPSY 626	. Assessment I: Assessment of Cognitive Abilities and Lab	3
CPSY 629	. Physiological Bases of Behavior	3
CPSY 630	. Cognitive Therapy and Lab	3
CPSY 688	.Integrative Health Care	5
	Total Credits	9.5

TERM 3 (WINTER)		
Course No	Course Title	Credits
CPSY 662	. Assessment II: Objective Personality Assessment and Lab . Behavior Therapy and Lab	3
	Total Credits	6.5

## TERM 4 (SPRING)

## Objective and Essay Comprehensive Examinations

A student must register in the term in which 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.

Course No	Course Title	Credits
CPSY 681 CPSY 682	Assessment III: Projective Assessment and Lab Essay Comprehensive Exam	not for credit not for credit
	Total Credits	
Total credits for se	econd year	25.5

## **Third Year** TERM 1 (SUMMER) STEPPS Comprehensive Exam Part B

Course No	Course Titl	e Credits
CPSY 652	Practicum I	
	Total Credi	ts

## TERM 2 (FALL)

Course No	Course Title	Credits
	Practicum II	
CPSY 674	Research III: Dissertation Development Seminar	1.5
	Total Credits	3

## TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 654	Practicum III	1.5
CPSY 674A	Research IV: Methodology Development	1.5
	Total Credits	3

## TERM 4 (SPRING)

Course No	Course Title	Credits
CPSY 655	Practicum IV	1.5
CPSY 661	. Administration, Consultation and Supervision	
	of Behavioral Health Care	3
CPSY 674B	Research V: Statistical and Proposal Planning	1.5
	Total Credits	6
Total credits for th	ird vear	13.5

## Fourth Year TERM 1 (SUMMER) STEPPS Comprehensive Exam Part C

Course No	Course Title	Credits
CPSY 675	Dissertation Advisement	1*
CPSY 710	Practicum V	1.5
	Total Credits	2.5*

## TERM 2 (FALL)

Course No	Course Title	Credits
CPSY 675	Dissertation Advisement	
CPSY 711	Practicum VI	1.5
	Elective	3
	Total Credits	5.5*

#### TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 675	Dissertation Advisement	
CPSY 712	Practicum VII	1.5
	Elective	3
	Total Credits	5.5*

## TERM 4 (SPRING)

Course No	Course Title	Credits
CPSY 675	Dissertation Advisement	
CPSY 713	Practicum VIII	1.5
	Elective	3
	Total Credits	5.5*

## 

\*Dissertation credits beyond Research do not count toward the minimum of 89 credits for degree requirements.

Fifth Year TERM 1 (SUMMER	)	
Course No	Course Title	Credits
CPSY 667	. Internship	0.5
CPSY 675	. Dissertation Advisement	1*
	Total Credits	1.5*

TERM 2 (FALL)		
Course No	Course Title Cre	edits
CPSY 667	. Internship	1
	Dissertation Advisement	
	Total Credits	. 2*

## TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 667	. Internship	1
	Dissertation Advisement	
	Total Credits	2*

#### TERM 4 (SPRING)

Course No	Course Title	Credits
CPSY 667	Internship	1
CPSY 675	Dissertation Advisement	1*
	Total Credits	2*

Total credits for fifth year .....7.5

\*Dissertation credits (beyond the 9 credits for Research I-III) do not count toward the minimum of 89 credits for degree requirements.

Sixth Year TERM 1 (SUMMER	)	
Course No	Course Title	Credits
CPSY 667	. Internship	0.5
	Total Credits	0.5

NOTE:

- 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. Credits for years six through seven: Following the completion of research, which includes Research III, IV and V, students must register for 1 credit Dissertation Advisement each term until thesis is successfully defended.
- 3. Students who register concurrently each term for 1 credit of Internship and Dissertation will have the fee waived for one of these credits. This is done only after Research courses are completed.

Note that this is only a sample plan. The College reserves the right to change course sequencing.

For students who entered the program prior to 2015

## First Year TERM 1 (FALL)

Students must register for the Doctoral Writing Skills Seminar in the Fall, Winter and Spring terms of their first year. No course credit is given. A \$500 fee is assessed for each term. Following the first term, and at the discretion of the program director, students may have the option to waive this seminar for the remaining terms.

Course No	Course Title	Credits
CPSY 102	Doctoral Writing Skills Seminarn	ot for credit
CPSY 601	Learning Theories	3
CPSY 603	Behavioral Medicine	3
CPSY 622	Ethics in Psychology	3
	Professional Development Seminar	
	Total Credits	10

TERM 2 (WINTER)		
Course No	Course Title	Credits
CPSY 103	. Doctoral Writing Skills Seminar	.not for credit
CPSY 608	. Social Psychology	
	. Lifespan Development	
CPSY 624	. Research I: Research Design and Methodology	
CPSY 695E	. Professional Development Seminar	1
	Total Credits	10

TERM 3 (SPRING)		
Course No	Course Title	Credits
CPSY 104	. Doctoral Writing Skills Seminar	t for credit
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
CPSY 695E	. Professional Development Seminar	1
	Total Credits	11
Total credits for first	st year	31

# <u>Clinical Psychology (PsyD) – Philadelphia Campus</u> For students who entered the program prior to 2015

## Second Year

TERM 1 (FALL)		
Course No	Course Title	Credits
CPSY 626	. Assessment I: Assessment of Cognitive Abilities and Lab	3
CPSY 629	. Physiological Bases of Behavior	3
CPSY 630	. Cognitive Therapy and Lab	3
	Total Credits	9

## TERM 2 (WINTER)

Course No	Course Title	Credits
CPSY 627	. Assessment II: Objective Personality Assessment and Lab	3
CPSY 662	. Behavior Therapy and Lab	3
	Total Credits	6

TERM 3 (SPRING)		
Course No	Course Title	Credits
CPSY 607	. Cognitive/Affective Bases of Behavior	3
CPSY 628	. Assessment III: Projective Assessment and Lab	3
	Total Credits	6

Total credits for year		21
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# *Clinical Psychology (PsyD) – Philadelphia Campus* For students who entered the program prior to 2015

## Third Year TERM 1 (SUMMER)

**Objective and Essay Comprehensive Examinations** 

A student must register in the term in which 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.

Course No	Course Title	Credits
CPSY 652	. Practicum I	
CPSY 681	. Essay Comprehensive Exam	.not for credit
CPSY 682	. Objective Comprehensive Exam	.not for credit
	Total Credits	1.5

#### TERM 2 (FALL)

Course No	Course Title	Credits
CPSY 605	History and Systems of Psychology	3
CPSY 653	Practicum II	1.5
CPSY 674	Research III: Dissertation Development Seminar	2
	Total Credits	6.5

## TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 654	. Practicum III	1.5
CPSY 674A	. Research IV: Methodology Development	2
	Total Credits	3.5

#### TERM 4 (SPRING)

Course No	Course Title	Credits
	Practicum IV	
	of Behavioral Health Care	
CPSY 674B	Research V: Statistical and Proposal Pla	anning
	Total Credits	
Total credits for	vear	

# <u>Clinical Psychology (PsyD) – Philadelphia Campus</u> For students who entered the program prior to 2015

## Fourth Year TERM 1 (SUMMER) STEPPS Comprehensive Exam

Course No	Course Title	Credits
CPSY 675	Dissertation Advisement	1*
CPSY 710	Practicum V	1.5
	Total Credits	2.5*

TERM 2 (FALL)		
Course No	Course Title	Credits
CPSY 675	. Dissertation Advisement	1*
CPSY 711	. Practicum VI	1.5
	Elective	3
	Total Credits	5.5*

## TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 675	. Dissertation Advisement	1*
CPSY 712	. Practicum VII	1.5
	Elective	3
	Total Credits	5.5*

## TERM 4 (SPRING)

Course No	Course Title	Credits
CPSY 675	. Dissertation Advisement	
CPSY 713	. Practicum VIII	1.5
	Elective	3
	Total Credits	5.5*
Total credits for ye	ar	19*

\*Dissertation credits (beyond the 9 credits for Research I-III) do not count toward the minimum of 89 credits for degree requirements.

For students who entered the program prior to 2015

# Fifth Year TERM 1 (SUMMER) Course No Course Title Credits CPSY 667 .... Internship .... .... CPSY 667 .... .... .... .... CPSY 667 .... Internship .... .... .... .... .... .... .... .... Credits Total Credits .... 1.5\*

## TERM 2 (FALL)

Course No	Course Title	Credits
CPSY 667	Internship	l
CPSY 675	Dissertation Advisement	

#### TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 667	. Internship	1
CPSY 675	. Dissertation Advisement	1*
	Total Credits	1.5*

#### TERM 2 (FALL)

Course No	Course Title	Credits
CPSY 667	. Internship	1
CPSY 675	. Dissertation Advisement	1*
	Total Credits	2*

## TERM 3 (WINTER)

Course No	Course Title	Credits
CPSY 667	. Internship	1
	Dissertation Advisement	
	Total Credits	

## TERM 4 (SPRING)

Course No	Course Title	Credits
CPSY 667	. Internship	1
CPSY 675	. Dissertation Advisement	1*
	Total Credits	2*
Total credits for year	ar	7.5*

\*Dissertation credits (beyond the 9 credits for Research I-III) do not count toward the minimum of 89 credits for degree requirements.

## COURSE DESCRIPTIONS

## <u>Doctor of Psychology – Clinical Psychology (PsyD)</u> <u>– Philadelphia Campus</u>

#### CPSY 102, 103, 104 – Doctoral Writing Skills Seminar 0 credits

This course is designed to provide structure for scientific and doctoral-level writing. These writing skills are deemed critical to successful communication in the PsyD program and the field of professional psychology.

## CPSY 499: Theories of Personality

## 3 credits

This online course fulfills the Theories of Personality prerequisite course requirement for the Psychology programs. 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 are explored.

## CPSY 500: Developmental Psychology

## 3 credits

This online course fulfills the Developmental Psychology prerequisite course requirement for the Psychology programs. 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.

## CPSY 501: Psychopathology

## 3 credits

This online course fulfills the Psychopathology prerequisite course requirement for the Psychology programs. 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 is presented.

## 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 602 – Comparative and Integrative Psychotherapy

## 2 credits

This course familiarizes students with different empirically supported treatment approaches and their clinical application and integration in clinical practice. Students review primary elements of Psychodynamic and Existential Psychotherapy, Structural Family Systems Therapy, Acceptance Commitment Therapy (ACT), Dialectical Behavior Therapy (DBT), Cognitive Behavioral Therapy (CBT) and Motivational Interviewing (MI). The course focuses on clinical application of these treatment approaches and the process of integrating these interventions in clinical practice.

## 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 606E – Advanced Motivational Interviewing Skills Training 1 credit

This course focuses on translating motivational interviewing (MI) knowledge into practice and building on basic MI skills acquired in previous classes and training. Through role plays and training exercises, students develop greater proficiency in MI using open questions, affirmations, reflections, and summaries to develop change talk and convey MI spirit. Students gain experience with more advanced strategic approaches that include looking back, looking forward, importance/confidence rulers, values discussions, moving among the four processes of a change conversation, and responding to discord and sustain talk. Topics include recent research on MI as it informs competent practice.

## 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, socioemotional 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.

Note: CPSY 616 and CPSY 620 replace former program requirements CPSY 611 and 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.

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 theory 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.

# 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 630E – LGBT: Culturally Competent Therapy with Lesbian, Gay, Bisexual and Transgender Persons and Their Families

This course provides an informative and useful introduction to understanding and working more effectively with lesbian, gay, bisexual, and transgender clients. A CBT lens will be applied to understand the developmental and ongoing experiences of LGBT people, how these can affect their psychological functioning, and what issues to be most aware of when treating them. Students will become more aware of some of the stressors that can affect the psychological vulnerability of LGBT persons, and identify ways to speak and relate to these clients to facilitate greater honesty and openness. The course will clarify characteristics of good and bad psychotherapeutic practice in working with these clients.

# 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 codes 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

## 1 or 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 is 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 – Psychopharmacology

## 1 or 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

Minimum of 16 hours/week at practicum site (20-24 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, identifying factors in patients' readiness to change, describing how to form a working therapeutic alliance with diverse clients and populations, and applying motivational interviewing techniques in order to maximize treatment participation. 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 16 hours/week at practicum site (20-24 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; describing the components of Person's model of cognitive case conceptualization and practicing the application of the Person's model to cases seen on practicum, practicing selected cognitive therapy techniques, and critically evaluating a faculty STEPPS video in terms of case formulation, intervention strategies, and social context factors including issues of power and privilege. 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 16 hours/week at practicum site (20-24 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 describing and practicing the application of the functional analytic model of case conceptualization and treatment planning, practice applying selected behavioral techniques and providing a strategic rationale for using each technique, and using the Psychotherapy Skills Inventory in evaluating psychotherapy sessions as a form of self-evaluation and peer consultation of psychotherapy skill.

## CPSY 655: Practicum IV

## 1.5 credits

Minimum of 16 hours/week at practicum site (20-24 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 describing principles of collaborative assessment and integrative psychological test report writing, strategies for integrating psychological test data that tap different dimensions of cognitive processing, affective functioning, and personality functioning into a coherent description of the whole person, and proving jargon-free strategies for providing feedback of standard psychological test and assessment results to diverse individuals and groups that accounts for health literacy and enhances treatment adherence. Students view a video of a faculty providing assessment feedback and provide critical feedback. In addition, students are introduced to the APPIC internship process and strategies for writing the first (autobiographical) essay. 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.

Prerequisite: 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 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 a 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 Prerequisites: CPSY 603, CPSY 626, CPSY 627, CPSY 628 and CPSY 630.

# CPSY 664 – Psychology of Eating and Weight 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, as well as obesity. 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 1 or 3 credits

This course is designed to provide an in-depth 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 1.5 – 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.

Prerequisites: 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 1.5 – 3 credits

Students develop an extensive, detailed outline of their literature review. Following this, students develop the methodology for completing their dissertation research project. Issues such as selection of an appropriate design model and subject recruitment and assignment are covered. Finally, students begin the process of completing the literature review based on their outline and bibliography.

## CPSY 674B – Research V: Statistical & Proposal Planning

#### 1.5 -3 credits

During this course, students select the proper data analytic models, 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.

Prerequisites: CPSY 674, CPSY 674A and CPSY 674B.

## 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

## 1 or 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 and Adolescent Psychotherapy

## 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

## 0 credits

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 680E – Introduction to DBT 1 credit

This course is an introductory course to Dialectic Behavior Therapy (DBT). It is designed to teach doctoral students the biosocial theory of emotional dysregulation, and the empirical foundations, core intervention content and methods of delivering DBT. Implications for diverse populations will be addressed, and discussion will center on the applicability of DBT to students' work.

#### CPSY 681 – Essay Comprehensive Exam 0 credits

Students register for this portion of the comprehensive exam during the first term in which the exam is offered upon students' eligibility.

#### CPSY 681E – Juvenile Offenders 1 credit

This course exposes students to the various contributing aspects of juvenile delinquency, including risk and protective factors, intelligence and intellectual disability, gender, the roles of the family, genetics and society, and physical, mental and substance abuse. Topics include the biological and psychological theories of delinquency, differential diagnosis, criminal justice system assessments, and best practice interventions.

### CPSY 682 – Objective Comprehensive Exam

### 0 credits

Students register for this portion of the comprehensive exam during the first term in which the exam is offered upon students' eligibility.

### CPSY 684 - Grief, Loss, and Bereavement

### 1 or 3 credits

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 684E – Special Topics: Treatment of Anxiety Disorders in Children and Adolescents

#### 1 credit

Students will develop an appreciation for the complex nature of childhood anxiety disorders and the diversity of circumstances in which they occur. Students will become familiar with empirically supported treatments for some of the anxiety disorders of childhood and adolescents, and become cognizant of special applications of child and adolescent treatment approaches.

### 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 685E – Special Topics: Treatment of Anger and Aggression in Youth 1 credit

Students will develop an appreciation for the complex nature of childhood anger and aggression and the diversity of circumstances in which anger and aggression occurs. Students will become familiar with empirically supported treatments for treating aggression and anger in children and adolescents, and become cognizant of special applications of child and adolescent treatment approaches.

### 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 686E – Special Topics: ADHD in Children and Adolescents 1 credit

Students will develop an appreciation for the complex nature of childhood ADHD. Students will become familiar with empirically supported treatments for treating ADHD in children and adolescents, and become cognizant of special applications of child and adolescent treatment approaches.

### CPSY 688 – Integrative Health Care

### .5 credits a term for 3 terms

This course expands upon principles learned in earlier foundation courses through case-based learning. Students approach clinical case discussions in mixed-discipline student groups including Physician Assistant Studies, Doctor of Osteopathic Medicine, School Psychology Mental Health Counseling and Organizational Developmental Leadership Program students that will be facilitated by a clinical psychologist, physician assistants, and psychiatrists, among other guest medical professionals. The purpose of the course is to further develop an appreciation and understanding for collaborative and integrative health care.

### CPSY 689E – PTSD in Veterans

### 1 credit

This course is designed as an introduction to the phenomenology and symptomatology of posttraumatic stress in military veterans. It aims to familiarize students with posttraumatic problems specific to veterans. These issues include PTSD and other mental health problems comorbid with PTSD, special characteristics of traumatic exposure, reintegration into civilian life and different veteran populations.

### 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, 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.

### 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 that will include practical clinical techniques for the treatment of night terrors; fear of water, small animals, thunder, insects, and 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 a 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 crisis scenarios will be presented, in concert with discussion on functioning as a member of a multidisciplinary team.

#### CPSY 695E – Professional Development Seminar 1 credit

Each term of a 1 credit Professional Development Seminar is designed to expose students to focused topics relating to competencies of clinical psychologists that will prepare them to function in a multitude of practice settings. Topics may include leadership, diversity and individual differences as pertaining to current concerns in psychology, interprofessional collaboration and integrated health care, leading health and psychosocial problems, advocacy, trends in evidence- based practice, business practices in psychology, self-care, and others.

### CPSY 697E – Special Topics: Cognitive Behavior Therapy for Posttraumatic 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 698E – Faith and Clinical Practice

### 3 credits

Faith is an inner resource most people possess. Yet few clinical training programs are intentional about teaching their students how to leverage their clients' faith to aid in therapy. This course will provide a model for using clients' own faith tradition as a therapeutic resource.

### CPSY 699E – Cognitive Behavioral Assessment and Treatment of Panic Disorders 1 credit

This course provides an intensive and highly focused overview of relevant clinical literature about the nature, assessment, diagnosis, conceptualization, and treatment of

panic disorders as well as extensive practical skill-building in assessing and treating patients with this problem.

### CPSY 700E – Recovery in Mental Illness 1 credit

In 2003, the New Freedom Commission on Mental Health published its final report to the president called "Achieving the Promise: Transforming Mental Health Care in America." This report called for the transformation of the American mental health care system by endorsing a vision that promotes recovery and resilience principles in order to afford every individual with a serious mental illness a life worth living, with the same opportunities and responsibilities as everyone else. This course investigates what exactly is the recovery paradigm and where did it come from? What does a recovery- oriented mental health service system look like and how is it different from the "traditional" service system? This course provides an overview of what recovery means in mental health care, including its application to service systems and to individual providers, such as clinical psychologists. The course explores the topic of recovery from historical, empirical, personal and conceptual perspectives.

### CPSY 701E – Web Survey Design and Implementation

This course is focused on providing guidance and information for students who plan on collecting data through Internet-based surveys (e.g., Survey Monkey, Qualtrics). Topics covered include issues pertaining to coverage and sampling within an Internet-accessible population, and effective survey design and formatting. Students have the opportunity to design a Web survey and receive constructive feedback on multiple aspects of its design.

#### 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 invoked 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 16 hours/week at practicum site (20-24 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 practice with applying selected standard behavioral and cognitive techniques designed to defuse resistance and improve motivation for change, and the rationale for using each technique; discussing the theoretical bases for understanding therapeutic resistance, and a variety of perspectives and methods for improving treatment participation and successful outcomes; and describing the Nezu and Nezu Problem Solving Model for formulating case conceptualizations and applying it to cases seen on practicum. 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 16 hours/week at practicum site (20-24 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 materials build upon Practicum I through V, and includes being able to describe and apply Needleman's cognitive case conceptualization model to cases seen on practicum; describing the salient features of Recovery-oriented clinical supervision; and practice applying a cognitive behavioral model of supervision with a junior colleague or trainee by making effective use of agenda-setting, formative feedback, and case conceptualization, while encouraging self-reflection and discovery. 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 16 hours/week at practicum site (20-24 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 includes describing the roles and methods of consultation and education in seeking resolution of problems within the medical, psychological and social contexts, describing a cognitive-behavioral model of patient-centered case consultation, and relevant concepts and theories of consultation and education based upon the scientific literature, including foundational knowledge of systemic conceptualizations while taking into account taking into contextual and diversity variables; engaging in a collaborative consultative relationship with others within psychology and other disciplines; and conducting an in-service on a clinical topic of interest to staff at the practicum site, including a PowerPoint of an in-service training session led by the student, with evaluations from participants. 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 16 hours/week at practicum site (20-24 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 and includes explaining the legal and ethical considerations in handling special situations (e.g., homicidality, suicidality, abuse, neglect, ethical challenges), and the need for supervision in handling them; analyzing and discussing one's responses to therapeutic interventions or ethical dilemmas in a variety of settings, with supervision; developing a plan addressing the need for self-care in professional practice, and a commitment to maintaining a regular program of self-care as part of life-long learning; developing a personal self-care plan with components that involve regular practice and anticipate and plan for how to overcome potential barriers to regular practice; and discussing the development of a commitment to understanding and incorporating Individual and Cultural Diversity into personal ethical values and into ethical principles in all professional activities. Students are expected to serve as peer consultants during weekly case discussions with a focus upon diversity issues

### <u>Postdoctoral Certificate – Clinical Health Psychology</u> <u>– Philadelphia Campus</u>

### First Year

TERM 1 (FALL)		-
Course No	Course Title C	redits
CPSY 803	. Advanced Ethics, Health Policy, and Multicultural	
	Competency in Medical Settings	3
CPSY 820	. Behavioral and Health Psychology Assessment	3
	. Clinical Placement: Clinical Health Psychology*	
	Total Credits	7

### TERM 2 (WINTER)

Course No	Course Title	Credits
CPSY 850	. Clinical Placement: Clinical Health Psychology* Therapy Elective selected from several options	1
	and approved by program director	
	Total Credits	4

### TERM 3 (SPRING)

Course No	Course Title	Credits
CPSY 850	. Clinical Placement: Clinical Health Psychology* Therapy Elective selected from several options	1
	and approved by program director	
	Total Credits	4

### 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)	
	Total Credits	1
Total credits for firs	t year	16

\*Practicum (8-20 on-site hours per week with group supervision plus practicum course).

### <u>Postdoctoral Certificate – Clinical Neuropsychology</u> <u>– Philadelphia Campus</u>

### 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
	Total Credits	7

#### 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
	Total Credits	7

#### TERM 3 (SPRING)

Course No	Course Title	Credits
CPSY 805	Cognitive Habilitation and Rehabilitation	
CPSY 860	Clinical Placement: Clinical Neuropsychology* .	1
	Total Credits	

#### 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*	
	Professional Evaluation (STEPPS)	not for credit
	Total Credits	1
Total credits for first year		

\*Practicum (8-20 on-site hours per week with group supervision plus practicum course).

### COURSE DESCRIPTIONS

### <u>Postdoctoral Certificates – Clinical Health Psychology</u> <u>– Clinical Neuropsychology – Philadelphia Campus</u>

### 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 the human brain in 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.

#### NON-CREDIT COURSES WRIT 100 – Writing Seminar 0 credits

This course is a non-credit course that is open to all students at the Philadelphia Campus. This course is designed to assist students in developing strategies for accessing their thoughts and conveying them through analytical and reason-based essay writing. It provides students with a tool kit which each can adapt to his/her specific needs to improve his/her writing. Students will also critique analytical writing for clarity and adherence to APA style. Fee \$500.00.

### PROGRAMS OF STUDY

### <u>Master of Science Programs in Counseling and Psychology (MS)</u> <u>– Philadelphia Campus</u>

#### MS in Counseling and Clinical Health Psychology (48-credits) MS in Counseling Psychology Studies (48-credits) MS in Mental Health Counseling (60-credits)

The Master of Science programs in counseling and psychology are offered at the Philadelphia PCOM campus only. Courses are offered on evenings and weekends, and the programs take two years to complete for full-time students. These programs may also be completed on a part-time basis.

The 48-credit Master of Science Program in Counseling and Clinical Health Psychology emphasizes a cognitive behavioral approach to treatment and provides specialized training in health psychology, behavioral medicine and collaboration with primary care physicians. This program prepares graduates to provide evaluation, counseling, therapy, and consultation services in a variety of counseling settings. The program trains highly skilled, compassionate, culturally sensitive clinicians to provide empirically-based, active, focused, and collaborative treatment. This program trains practitioner-scholars to offer assessment, therapeutic interventions, consultation, program evaluation, social justice advocacy, and follow-up services. Incorporating knowledge of the biopsychosocial model, the program provides a foundation for ethical practice that facilitates the well-being of individuals, families, and communities. It is designed for individuals applying for licensure as a professional counselor (LPC) in states that require a 48-credit master's degree and accept psychology credits or for individuals who plan to

a 48-credit master's degree and accept psychology credits or for individuals who plan to pursue a doctoral degree in counseling, psychology, or a related field. This program features specialized practicum and internship experiences to prepare students to work in their desired setting.

The 48-credit Master of Science in Counseling Psychology Studies degree qualifies professionals to work in a non-clinical capacity in the field of health and human services. This degree prepares students to participate in certain types of nonclinical supervised patient care and counseling-related scholarship. This degree would enable professionals to help social workers, healthcare workers, and other professionals to provide a variety of services. Professionals with this degree typically work under the direction of workers from a variety of fields, such as nursing, psychiatry, psychology, or social work. Job settings typically include private practices, schools, offices, hospitals, community centers, and businesses. This degree can also serve as preparation for further graduate studies in psychology, counseling, or other human service fields. Graduates with this degree would not qualify for licensure as a licensed professional counselor.

The 60-credit Master of Science Program in Mental Health Counseling prepares highly skilled, compassionate counselors to provide empirically-based, culturally sensitive, active, focused, and collaborative treatment. Grounded in the cognitive-behavioral tradition, this program trains practitioner-scholars to offer assessment, therapeutic interventions, consultation, program evaluation, social justice advocacy, and follow-up services. Incorporating knowledge of the biopsychosocial model, the program provides a foundation for ethical practice that facilitates the well-being of individuals, families, and communities. This program allows concentrations in particular areas such as health

counseling, addictions and offender counseling, and cognitive behavioral therapy, and features specialized practicum and internship experiences to prepare students to work in their desired setting. The program prepares master's level graduates with the attitudes, knowledge, and skills to pursue credentialing as a licensed professional counselor (LPC) in many states and/or doctoral studies. The addictions and offender concentration prepares students for the Certified Drug and Alcohol Counselor (CADC) credential.

### Certificate of Advanced Graduate Studies

This program provides graduate-level psychology and counseling courses to individuals seeking to meet credentialing requirements or augment their training. CAGS specialization tracks: Cognitive Behavior Therapy, Professional Psychology. Applicants for a Certificate of Advanced Graduate Studies 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 Robert DiTomasso, Ph.D., ABPP and various faculty of the Psychology Department 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

### <u>Master of Science Programs in Counseling and Psychology (MS)</u> <u>– Philadelphia Campus</u>

MS in Counseling and Clinical Health Psychology (48-credits) MS in Counseling Psychology Studies (48-credits) MS in Mental Health Counseling (60-credits) MS in Mental Health Counseling (60-credits) -Addictions Concentration

The first year of study for all three of these options is the same. The change in requirements will occur in the student's second year of coursework.

### First Year

IERMII (FALL)		
Course No	Course Title	Credits
PSY 501	.Theories of Counseling	3
PSY 505	Assessment and Counseling Skills	3
PSY 508	.Lifespan Development	3
	Total Credits	9

### TERM 2 (WINTER)

Course No	Course Title	Credits
PSY 503	Counseling Perspectives on Psychopathology	3
PSY 506	Foundations of Psychotherapy	3
	Program Evaluation, Research Methods and Statistics	
	Total Credits	9

Course No	Course Title	Credits
PSY 507	Social and Cultural Foundations in Counseling	3
PSY 509	Tests and Measurements	3
PSY 510	Professional, Legal and Ethical Issues in Counseling	3
	Total Credits	9

## Master of Science in Counseling and Clinical Health Psychology (MS) <u>– Philadelphia Campus</u> (48 credits)

### Second Year

TERM 1 (SUMMER	٤)	
Course No	Course Title	Credits
PSY 504	Group Therapy .	 
	Total Credits	 

#### TERM 2 (FALL)

Course No	Course Title	Credits
PSY 554	. Research Seminar I	1
PSY 561	. Practicum Internship Seminar I	2
PSY 502	. Behavioral Change in Health Counseling	3
	Total Credits	6

### TERM 3 (WINTER)

Course No	Course Title	Credits
PSY 555	. Research Seminar II	1
PSY 562	. Internship Seminar II	2
PSY 553	. Counseling in Healthcare Settings:	
	Integrating Seminar	3
	Total Credits	6

Course No	Course Title	Credits
PSY 556	. Research Seminar III	1
PSY 563	. Internship Seminar III	2
	Elective	3
	Total Credits	6

Total credits required for degree completion	n
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### <u>Master of Science Programs in Counseling Psychology Studies (MS)</u> <u>– Philadelphia Campus</u>

### Second Year

TERM 1 (SUMME	ER)	
Course No	Course Title	Credits
PSY 504	Group Therapy	
	Total Credits	

TERM 2 (FALL)	
Course No	Course Title
PSY 502	. Behavioral Change in Health Counseling

Credits							
						.3	

	Total Credits	
	Elective	
PSY 554	Research Seminar I	

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

Course No	Course Title	Credits
PSY 553	. Counseling in Healthcare Settings:	
	Integrating Seminar	3
PSY 555	. Research Seminar II	1
	Elective	3
	Total Credits	7

### TERM 4 (SPRING)

Course No	Course Title	Credits
PSY 556	Research Seminar III	
	Total Credits	4
		10

### <u>Master of Science Programs in Mental Health Counseling (MS)</u> <u>– Philadelphia Campus</u>

### Second Year

TERM 1 (SUMME	R)	
Course No	Course Title	Credits
PSY 504	Group Therapy	
	Total Credits .	

#### TERM 2 (FALL)

Course No	Course Title	Credits
PSY 502	. Behavioral Changes in Health Counseling	3
PSY 561	. Practicum Internship Seminar I	2
PSY 581	. Professional Development I	1
	Elective	
	Total Credits	9

### TERM 3 (WINTER)

Course No	Course Title	Credits
PSY 553	. Counseling in Healthcare Settings:	
	Integrating Seminar	
PSY 562	. Internship Seminar II	
	. Professional Development II	
	Elective	
	Total Credits	9

# TERM 4 (SPRING) Course No Course Title Credits PSY 563 Internship Seminar III 2 PSY 583 Professional Development III 1 PSY 571 Career and Lifestyle Development 3 Elective 3 7 Total Credits 9

### <u>Curriculum Master of Science in Mental Health Counseling (MS)</u> <u>– Philadelphia Campus</u>

Third Year TERM 1 (SUMM		
<b>X</b> = -	Course Title	Credits
	Elective in concentration of study	
	Total Credits	3

### Master of Science Programs in Mental Health Counseling Addictions and Offender Counseling Concentration (MS) – Philadelphia Campus

### Second Year

TERM 1 (SUMME	R)	
Course No	Course Title	Credits
PSY 504	Group Therapy	
	Total Credits .	

### TERM 2 (FALL)

Course No	Course Title	Credits
HPSY 504	. Assessing and Treating Substance Use Disorders	3
HPSY 508	. Biopsychosocial Basis of Addictions	3
PSY 561	. Practicum/Internship I	
	. Professional Development I	
	Total Credits	9

### TERM 3 (WINTER)

Course No	Course Title	Credits
HPSY 503	. Counseling in Correctional Settings	3
HPSY 509	. Advanced Interventions in Addictions Counseling	3
PSY 562	. Internship II	2
PSY 582	. Professional Development II	1
	Total Credits	9

Course No	Course Title	Credits
HPSY 507	. Addictions and Correctional Counseling:	
	Integrating Seminar	3
PSY 563	. Internship III	
PSY 571	. Career and Lifestyle Development	3
PSY 583	. Professional Development III	1
	Total Credits	9

### Master of Science Programs in Mental Health Counseling Addictions and Offender Counseling Concentration (MS) – Philadelphia Campus

### Third Year

TERM 1 (SUMM	IER)	
Course No	Course Title	Credits
HPSY 506	Child, Adolescent and Family Issues in	
	Substance Use Disorders	
	Total Credits	
Total credits req	uired for degree completion	60

### <u>Certificate of Advanced Graduate Studies – Cognitive Behavioral</u> <u>Therapy – Philadelphia Campus</u>

First Year		
TERM 1 (FALL)	)	
Course No	Course Title	Credits
This is a year-lor	1g course.	
PSY 575	Cognitive Behavior Therapy	
	Total Credits	6
TERM 2 & 3 (V	VINTER & SPRING)	
Course No	Course Title	Credits
	Any two 3 credit PSY or HPSY courses	
	Total Credits	

Total credits required for completion of certificate ......12

### COURSE DESCRIPTIONS

### <u>Master of Science – Mental Health Counseling – Addictions and</u> <u>Offender Counseling Concentration (MS) – Philadelphia Campus</u>

### 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 Substance Use Disorders 3 credits

This course presents an overview of counseling and 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 counseling theories.

### HPSY 503 – Counseling in Correctional Settings

### 3 credits

This course is an introductory overview of counseling psychology theories of offending and offender change. Emphasis will be placed on empirically validated counseling 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 counseling approaches.

### HPSY 505 – Motivational Interviewing

### 3 credits

This course will present both theory and practice of motivational interviewing, an empirically validated counseling approach for helping clients initiate healthy behavior changes. Through the use of 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 counseling 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 Counseling: 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 counseling intervention programs for persons with substance use disorders who may also be offenders.

### HPSY 508 – Biopsychosocial Basis of Addictions 3 credits

This course presents an overview of the biopsychosocial theories of addiction, with a specific emphasis on integrating these theories into the counseling process. Neurobiological, cognitive-behavior, psychodynamic and traditional 12- step processes will be covered.

### HPSY 509 – Advanced Interventions in Addictions Counseling 3 credits

This course presents both theory and practice of motivational interviewing and mindfulness therapy as well as other empirically validated treatments for addicted clients. Throughout the use of lecture, demonstration and role-plays, students learn how to effectively utilize these counseling techniques in their addiction practice.

### COURSE DESCRIPTIONS

### <u>Master of Science – Counseling and Clinical Health Psychology</u> <u>Master of Science – Counseling Psychology Studies</u> <u>Master of Science – Mental Health Counseling – Philadelphia Campus</u>

### PSY 501 – Theories of Counseling 3 credits

This course surveys the various theories of personality and the models of counseling that stem from them. The interaction and effects of forces that influence personality development will be explored.

### PSY 502 – Behavioral Change in Health Counseling 3 credits

This course involves applying learning principles and environmental control to behavioral change in health-related areas. The emphasis is on founding principles, assessment methods, and counseling techniques used to foster health- promoting behaviors and decrease maladaptive health-related behaviors.

### PSY 503 – Counseling Perspectives on 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/ counseling. Students will learn to apply group approaches to the treatment of mental and medical health problems.

### PSY 505 – Assessment and Counseling Skills

#### 3 credits

This course covers basic interviewing, assessment and counseling skills. 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 counseling procedures are covered in this course. It is designed to provide an introduction to the basic skills used in counseling generally and CBT specifically.

### PSY 507 – Social and Cultural Foundations in Counseling

### 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 – Lifespan Development

### 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 counseling 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 in Counseling 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 515 – Trauma Counseling: Assessment and Intervention

### 3 credits

Studies estimate that between 51 and 98% of clients accessing community mental health treatment have trauma histories. More than just PTSD, trauma is a complex disorder requiring assessment of clients' thoughts, feelings, and behaviors, as well as their ability to regulate their own physiologic, emotional, and social environments. This class explores how trauma impacts not only one's cognitive and emotional processing, but also dysregulates one's neurophysiology, and discusses evidence-based assessments and interventions that counselors can use to help alleviate the negative impact of trauma with their clients.

### PSY 519 – ACT in Behavioral Medicine

### 3 credits

This course introduces the student to Acceptance and Commitment Therapy (and related practices such as Compassion Focused Therapy (CFT), Functional Analytic Psychotherapy (FAP), and Relational Frame Theory (RFT)), and its application to behavioral medicine. Applications within behavioral medicine include disease prevention, health promotion, symptom management, and disease management, particularly where medical methods provide incomplete solutions, such as with chronic health conditions.

### PSY 551 – Physiology, Health and Counseling

### 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 counseling 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 – Counseling in Healthcare Settings: Integrating Seminar 3 credits

Advanced training in the application of counseling theory and techniques to clinical cases. This course integrates the coursework and clinical experiences gained throughout the MS program.

### PSY 554, 555 and 556 Research Seminar I, II and III

### 1 credit each term

This three course research sequence spans one year and culminates in the successfully completion of a capstone research project proposal concerning a clinical health or counseling psychology topic of interest. Students will survey the literature, develop a research question, construct a literature review, and propose a research study under the mentorship of a faculty member. This course sequence is required for students' who major in: Counseling and Clinical Health Psychology, and Counseling Psychology Studies.

### PSY 561 – Practicum Internship Seminar I PSY 562 – Internship II PSY 563 – Internship III

### 2 credits each term

A year-long sequence of applied clinical work will promote the development of counseling skills and the integration of theory with real-world experience. In addition, there will be intensive supervision, skill development exercises, and literature reviews tailored to the student's experiences provided in a weekly seminar. This course sequence is required for students' who major in: Counseling and Clinical Health Psychology, Mental Health Counseling, and Mental Health Counseling with a concentration in Addiction and Offenders.

Prerequisites: PSY 503, PSY 505, PSY 506 and PSY 510.

### PSY 570 – Research Seminar 3 credits

### PSY 571 – Career and Lifestyle Development 3 credits

This course provides an understanding of career development, theories, decisionmaking models and related life factors. Students will also be introduced to career counseling processes, techniques and resources.

### PSY 581, 582 and 583 Professional Development I, II, and III 1 credit each term

This three course sequence spans one year and provides individualized professional development activities and mentorship experiences in the field of counseling. This course sequence is required for students' who major in: Mental Health Counseling, and the Mental Health Counseling with a concentration in Addictions and Offenders.

### PSY 512 – Marriage and Family Counseling 3 credits

This course familiarizes students with various theories of marriage and family therapy, including the historical context of each. Approaches include narrative, psychoeducation, structural, strategic, intergenerational, cognitive-behavioral, and psychodynamic models. Case studies, critical discussions, role plays and video tapes of master counselors are used to deepen students' understanding of the different counselors' models.

### 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.

### PROGRAMS OF STUDY

### <u>Department of Psychology – School Psychology (PsyD)</u> <u>– Philadelphia Campus</u>

### School Psychology - Doctor of Psychology (PsyD), 5-Year Program

The PsyD in School Psychology program trains, develops, and prepares entry-level school psychologists with a focus on applied behavior analysis, empirically supported cognitive behavioral techniques, and neuropsychological assessment in the schools. Adopting the practitioner-scholar model of training and a competency-based model of education, the program prepares graduates to provide empirically-based and ethnically-sound direct and indirect school psychological services that promote learning and well-being of all children with sensitive to culture and diversity. The PsyD program is school psychology requires a minimum of 107 credit hours (which includes two years of practical and a one year externship) and the completion of both a doctoral dissertation and internship.

#### School Psychology – Doctor of Psychology (PsyD), Advanced Program

The advanced-level PsyD in 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 is required 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. The doctoral program requires 61 credits beyond the specialist level, with coursework in professional school psychology, consultation/intervention, development, cognitive therapy, community psychology, assessment and electives. Students must complete a doctoral-level internship and dissertation. The School Psychology program offers both a therapy-focused emphasis and a school neuropsychology emphasis with classes in a traditional evening on-campus schedule. The program is approved by the National Association of School Psychology Boards (ASPPB) as a doctoral psychology program meeting designation criteria.

#### Respecialization in School Psychology

Respecialization candidates who have already completed a doctoral degree in psychology may apply for admission to respecialize in School Psychology. The criteria for acceptance in School Psychology are the same criteria required of applicants requesting admission to the School Psychology doctoral program. The timeline to complete the respecialization program as well as the number of credits required will be determined upon a full application review.

# Doctor of Psychology in School Psychology (PsyD) <u>– Philadelphia Campus</u> 5-Year Program

### First Year

TERM 1 (SUMMER)	)
Course No	Course Title

Course No	Course Title	Credits
SPSY 501	Professional School Psychology	
SPSY 510	Learning: Theory and Application	
	Total Credits	

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### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 512	.Psychometrics	3
SPSY 524	.Basic Principles of ABA	3
	Assessment I: Cognitive Assessment	
	Writing in Psychology	NC
	Total Credits	9

### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 526	Single Subject Research Design	
SPSY 615	Assessment II: Psychoeducational Assessment	
SPSY 748	Biological Bases of Behavior	
SPSY 750	Life Span Development Theories	
SPSY 751	Affective Bases of Behavior	
	Total Credits	

Course No	Course Title	Credits
SPSY 507	Exceptional Child	3
SPSY 551	Practicum in School Psychology	1
SPSY 618	Assessment III: Behavioral and Social-Emotional Assessi	ment3
SPSY 749	Social Bases of Behavior	2
SPSY 796	Objective Comp Examination	0
	Total Credits	9

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

### <u>– Philadelphia Campus</u> 5-Year Program

### Second Year

Course No	Course Title	Credits
	.Multicultural Counseling: Methods and Technique	3
SPSY 527	.Ethics and Professional Practice in School Psychology &	
	Behavior Analysis	3
	Total Credits	6

### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 619	.Consultation & Collaboration in Educational Settings	3
SPSY 763	.Practicum: Applied Law and Ethics	1
SPSY 771	.Integrative Seminar in Cognitive Development	1
SPSY 783	. Research I: Design and Methods	3
	Total Credits	8

#### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 617	Academic & Behavioral Interventions	3
SPSY 764	.Practicum: School Structure & Organization	1
	.Integrative Seminar in Social & Affective Development .	
SPSY 784	.Research II: Statistics	3
	Total Credits	8

Course No	Course Title	Credits
SPSY 525	Behavior Change & System Support	3
SPSY 765	Practicum: Family-School Partnerships	1
SPSY 732	Child & Adolescent Psychopathology	3
SPSY 773	Integrative Seminar in Biological & Physical	
	Development	1
SPSY 797	Written Comprehensive Examination	0
	Total Credits	8

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

### <u>– Philadelphia Campus</u> 5-Year Program

### Third Year

TERM I (SUMME	R)	
Course No	Course Title	Credits
SPSY 752	Qualitative Analysis	1
SPSY 753	Program Evaluation	1
SPSY 798	Special Topics: Autism	1
	Total Credits	3

### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 734	Multicultural Community School Psychology	3
SPSY 736	Cognitive Behavior Therapy I	2
SPSY 760	Advanced Integrative Practicum in Applied Cognitive	
	Development	1
SPSY 790	Dissertation Seminar	1
	Total Credits	7

### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 737	.Cognitive Behavior Therapy II	2
SPSY 746	Physiological Bases of Behavior	3
SPSY 761	. Advanced Integrative Practicum in Applied	
	School-Emotional Development	1
SPSY 790	Dissertation Seminar	
	Total Credits	7

Course No	Course Title	Credits
SPSY 620	Effective Prevention & Crisis Intervention	
SPSY 623	English Learners: Educational Implications &	
	Accommodations	3
SPSY 762	Advanced Integrative Practicum in Applied	
	Health Psychology	1
SPSY 790	Dissertation Seminar	1
	Total Credits	8

### Doctor of Psychology in School Psychology (PsyD) <u>– Philadelphia Campus</u> 5-Year Program

### Fourth Year

TERM 1 (SUMMER	2)	
Course No	Course Title	Credits
SPSY 796	Objective Comprehensive Examination	0
	Total Credits	0

### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 735	.Advanced Assessment and Prevention Intervention .	3
SPSY 745	. Supervision & Administration	1
SPSY 779	.School-Based Externship	1
	.Dissertation Advisement	
	Total Credits	6

### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 741	.Neuropsychology in the Schools	3
SPSY 733	.History & Systems	2
SPSY 779	.School-Based Externship	1
SPSY 792	.Dissertation Advisement	1
	Total Credits	7

Course No	Course Title	Credits
SPSY 621	.Health Psychology & Medicine Applied to Schools	1
SPSY 747	. Neuropathology	1
SPSY 779	.School-Based Externship	1
	.Dissertation Advisement	
	Total Credits	4

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

### <u>– Philadelphia Campus</u> 5-Year Program

### Fifth Year

TERM 1 (SUMME	ER)	
Course No	Course Title	Credits
SPSY 700	Internship	
	Total Credits	0

#### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 786	Internship .	
	Total Credits	1

### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 787	Internship	
	Total Credits	1

Course No	Course Title	Credits
SPSY 788	Internship	 1
	Total Credits	 1

### Advanced-Level School Psychology (PsyD) – Philadelphia Campus

### First Year TERM 1 (SUMMER)

Course No	Course Title	Credits
SPSY 740	. Social Psychology and Group Process	
	Total Credits	

### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 731	. Ethics and Professional Issues in Psychology	3
SPSY 732	. Child and Adolescent Psychopathology	3
SPSY 736	. Cognitive Behavior Therapy I	1
	Total Credits	7

### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 734	. Multicultural Community School Psychology	3
SPSY 737	. Cognitive Behavior Therapy II	2
SPSY 791	. Cognitive and Affective Bases of Behavior	3
	Total Credits	8

#### TERM 4 (SPRING)

Course No	Course Title	Credits
SPSY 735	. Advanced Assessment and Prevention/Intervention	3
SPSY 735P	.Practicum in Advanced Assessment and	
	Prevention/Intervention	1
SPSY 738	.CBT in the School: Practicum	2
SPSY 746	.Physiological Bases of Behavior	3
SPSY 781	.Psychopharmacology (elective)*	1
	Total Credits	10

\*Students are required to take 3 credits of electives by choosing from the one credit electives listed. Students may be permitted to take one 3 credit elective in the Clinical PsyD program to satisfy this requirement.

### Advanced-Level School Psychology (PsyD) – Philadelphia Campus

### Second Year

TERM 1 (SUMMER	)	
Course No	Course Title	Credits
SPSY 730	. Psychometrics	3
	Electives – Choice of:	
SPSY 747	. Neuropathology/Elective*	1
SPSY 782	. Group Therapy in the Schools/Elective*	1
SPSY 799	. Special Topics in Multicultural Principles/Elective*	1
	Total Credits	4

### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 741	Neuropsychology in the Schools	3
SPSY 745	Issues in Supervision and Administration	1
SPSY 783	Research I: Design and Methods	3
	Total Credits	7

#### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 744	. Consultation in Home, School and Community Settings	2
SPSY 741P	. Practicum in Neuropsychology in the Schools	1
SPSY 784	. Research II:. Statistics	3
	Total Credits	6

#### TERM 4 (SPRING)

Course No	Course Title	Credits
SPSY 733	. History and Systems	3
SPSY 785	Research III: Dissertation Design & Methodology	3
SPSY 796	Objective Comprehensive Examination	for credit
SPSY 798	Written Comprehensive Examination	for credit
	Total Credits	6

\*Students are required to take 3 credits of electives by choosing from the one credit electives listed. Students may be permitted to take one 3 credit elective in the Clinical PsyD program to satisfy this requirement.

### Advanced-Level School Psychology (PsyD) – Philadelphia Campus

### Third Year

TERM 1 (SUMMER	)	
Course No	Course Title	Credits
SPSY 700	. Introduction to Internship Seminar .	
	Total Credits	0

# TERM 2 (FALL)Course NoCourse TitleCreditsSPSY 786Internship Seminar I1SPSY 790Dissertation Seminar2Total Credits3

#### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 787	. Internship Seminar II	1
SPSY 790	Dissertation Seminar	2
	Total Credits	3

### TERM 4 (SPRING)

Course No	Course Title	Credits
	. Internship Seminar III	
SPSY 790	Dissertation Seminar	2
	Total Credits	3

After the third year, if Dissertation has not been defended, students are required to register each term for SPSY 792 Dissertation for one credit.

### Advanced-Level School Psychology (PsyD) – Philadelphia Campus

NOTE:

- 1. There will be no charge when registering for the 0 credit of internship.
- 2. Students who register concurrently in a term for the one credit Internship and the two credits Dissertation Seminar will be charged for 3 credits.
- 3. Students who register concurrently in a term for the one credit Internship and the one credit Dissertation will be charged for 1 credit.
- 4. Students who register for only the 1 credit Internship will be charged for 1 credit.
- 5. Two Practicum courses, SPSY 641P Practicum in Neuropsychology in the Schools and SPSY 635P Practicum in Advanced Assessment and Prevention/ Intervention, are each 1 credit and included in total required for degree, but are not charged.

## PROGRAMS OF STUDY

### <u>School Psychology – Educational Specialist (EdS)</u> <u>– Philadelphia Campus</u>

The Educational Specialist program, in combination with the MS in School Psychology or its equivalent, prepares students for a career in school psychology. 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 II exam, graduates can attain school psychologist certification by the Commonwealth of Pennsylvania and apply for national (NCSP) certification eligibility. The program is NASP-approved. Upon approval, students may satisfy master-level prerequisites with MS School Psychology offerings.

Acceptance into an accelerated MS/EdS program is an option, which adds 9 credits of EdS-level coursework to the MS program, as well as an additional 9 hours to the secondyear of coursework. This combined MS/EdS program may be completed in three full calendar years. More information about this option is available on request.

### **COURSE SEQUENCE**

### <u>School Psychology – Educational Specialist (EdS)</u> <u>– Philadelphia Campus</u>

## First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
	Assessment I: Cognitive Assessme	
SPSY 614	Multicultural Issues in Psychology	
	Total Credits	

#### TERM 2 (WINTER)

Course No	Course Title	Credits
SPSY 615	Assessment II: Psycho-Educational Assessment	
	of the Exceptional Learner	3
SPSY 616	Educational Research and Program Evaluation	
	Total Credits	6

#### TERM 3 (SPRING)

Course No	Course Title	Credits
SPSY 618	.Assessment III: Behavioral and Social Emotional Assessm	1ent3
SPSY 623	.English Learners: Educational Implications	
	& Accommodations	3
	Total Credits	6

## <u>School Psychology – Educational Specialist (EdS)</u> <u>– Philadelphia Campus</u>

## Second Year

TERM 1 (SUMME	ER)	
Course No	Course Title	Credits
SPSY 611	Curriculum Instruction and Education Leadership	
	Total Credits	3

#### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 619	.Consultation and Collaboration in Educational Settings	3
SPSY 621	.Health Psychology and Medicine Applied to Schools	1
SPSY 652	.Practicum Seminar in School Psychology:	
	Applied Law and Ethics	2
	Total Credits	6

#### TERM 3 (WINTER

Course No	Course Title	Credits
SPSY 609	. Cognitive Behavior Therapy in the Schools	3
SPSY 617	. Academic and Behavioral Interventions	3
SPSY 653	. Practicum Seminar in School Psychology:	
	School Structure and Organization	1
	Total Credits	7

#### TERM 4 (SPRING)

Course No	Course Title	Credits
SPSY 620	. Effective Prevention and Crisis Intervention	
	at Home and School	3
SPSY 654	. Practicum Seminar in School Psychology:	
	Family School Partnerships	2
	Total Credits	5

## <u>School Psychology – Educational Specialist (EdS)</u> <u>– Philadelphia Campus</u>

## Third Year

TERM 1 (FALL)		
Course No	Course Title	Credits
SPSY 661	School Psychology Internship Sem	inar I
	Total Credits	

TERM 2 (WINTER)		
Course No	Course Title	Credits
SPSY 662	. School Psychology Internship Seminar II	2
	Total Credits	2

TERM 3 (SPRING)		
Course No	Course Title	Credits
SPSY 663	. School Psychology Internship Seminar III	2
	Total Credits	2
Total credits requir	ed for degree	45
Total credits requir	ed for certification	78

### PROGRAM OF STUDY

### <u>School Psychology – Master of Science with Specialization in Applied</u> <u>Behavior Analysis (MS) – Philadelphia Campus</u>

The Master of Science in School Psychology program is designed to provide students with a broad theoretical and practical background in psychology, behavior analysis, child development, learning and research. The program requires 33 credits of graduate study and a comprehensive examination. Upon completion of the MS degree, students have fulfilled the required coursework to continue progress towards school psychology certification via the Educational Specialist (EdS) degree and/or have the required coursework to continue to accrue supervised experience towards Behavior Analysis Certification. Students who would like to continue working toward becoming a certified school psychologist can apply to the Educational Specialist in School Psychology Program. The coursework is approved by the Behavior Analyst Certification Board (BACB), and the MS/EdS program combined is approved by the National Association of School Psychologists (NASP).

#### Certificate of Graduate Studies (ON LINE)

A Certificate of Graduate Study is offered in Applied Behavior Analysis by the faculty of the Department of Psychology. The certificate program allows students with a baccalaureate degree in psychology or related field to take the same six-course sequence that is offered to masters-level students in the Certificate of Advanced Graduate Study program. Students in the graduate certificate program will qualify for assistant behavior analyst certification (BCaBA) by the Behavior Analyst Certification Board. The 18-credit program may be completed in one or two years, and provides an opportunity for bachelors-level students to earn a first career certification in the behavioral sciences. Information on behavior analyst certifications is available at http://www.bacb.com/index.php

### **COURSE SEQUENCE**

### <u>School Psychology – Master of Science with Specialization in Applied</u> <u>Behavior Analysis (MS) – Philadelphia Campus</u>

### First Year

TERM 1 (SUMMER)			
Course No	Course Title	Credits	
SPSY 501	. Professional School Psychology	3	
SPSY 510	. Learning: Theory and Application	3	
	Total Credits	6	

#### TERM 2 (FALL)

Course No	Course Title	Credits
SPSY 512	Psychometrics	3
	Developmental Psychology	
SPSY 524	. Basic Principles in Applied Behavior Analysis	3
	Total Credits	7

#### TERM 3 (WINTER)

Course No	Course Title	Credits
SPSY 503	. Introduction to Research Design and Data Analysis	2
SPSY 506	. Physiology, Health and Psychology	3
SPSY 526	. School-Based Single Subject Research Seminar	2
	Total Credits	7

#### TERM 4 (SPRING)

Course No	Course Title	Credits
SPSY 507	. Exceptional Child: Psychological and	
	Educational Implications	3
SPSY 525	. Behavior Change and Systems Support	
	.School Psychology Practicum Field Experience Seminar	
	Total Credits	7

## COURSE SEQUENCE

### <u>School Psychology – Master of Science with Specialization in Applied</u> <u>Behavior Analysis (MS) – Philadelphia Campus</u>

## Second Year

TERM 1 (SUMMER)			
Course No	Course Title	Credits	
	Multicultural Counseling: Methods and Techniques Ethics and Professional Practice in School	3	
	Psychology and Behavior Analysis	3	
	Total Credits	6	
Total credits required for degree completion			

### COURSE DESCRIPTIONS

### <u>School Psychology – Philadelphia Campus</u>

## SPSY 501 – Professional School Psychology

#### 3 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 graduate preparation, credentialing, and service delivery. Legal and ethical issues for school psychology are addressed extensively as well. Class discussions address the domains of practice identified in the NASP Model for Comprehensive and Integrated School Psychological Services (National Association of School Psychologists, 2010). In addition, attention is given to historical trends and considerations for the future of the profession.

### SPSY 503 – Introduction to Research Design and Data Analysis

#### 2 credits

This course is an introduction to the various methods used in educational, behavioral and psychological research. Course objectives are to understand the basic research designs and the methodological issues in formulating, planning, designing, implementing, analyzing and interpreting the results of research investigations, as well as ethical and cultural issues. The students will utilize and interpret basic descriptive statistics, in addition to being able to plan, conduct and interpret inferential statistics at an introductory level, using t-tests, correlations, regressions and ANOVA. The class format will be a mixture of lectures, discussions, and "hands-on" exercises that will allow students to become familiar with the techniques involved in performing research.

#### SPSY 504 – Developmental Psychology

#### 1 credit

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 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. In addition to understanding the functions of the brain, emphasis is also given to exploring how different cultural elements impact advances in physiology, health, and psychology. Neurodevelopmental disabilities, assessment and intervention with children and youth at home and school are among the topics covered.

# SPSY 507 – Exceptional Child: Psychological and Educational Implications 3 credits

This course is designed to provide a basic knowledge base about development that allows the student to understand atypical and cultural influences on 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 – Multicultural Counseling: Methods and Techniques 2–3 credits

The major theoretical approaches to psychotherapy and counseling 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 and counseling in general and cognitive behavior therapy (CBT) specifically. Students learn how to deal with social and emotional problems frequently encountered in schoolage children. Research focusing on treatment outcome as well as case material will be reviewed. Ethical and cultural considerations in the psychotherapeutic treatment of children will also be discussed.

Prerequisite: SPSY 504

## 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 512 – Psychometrics

#### 3 credits

Tests and Measurements is a course dealing with basic concepts in the selection, administration, scoring and interpretation of educational, behavioral and psychological tests commonly used in the field of school psychology and behavior analysis. 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, behavioral, neuropsychological, academic and social- emotional functioning. Procedures for interpreting and communicating test results will be introduced, and issues related to the social, cultural, legal and ethical aspects of assessment will be explored. Lectures, class discussions, student presentations and readings will be used. Student performance will be evaluated through multiple methods.

#### SPSY 524 – Basic Principles in Applied Behavior Analysis 3 credits

This course is an introductory course that provides an overview of the basic principles in applied behavior analysis and their application in the educational/clinical setting. Students will be provided with an overview of the essential characteristics of applied behavior analysis as well as the principles, processes and concepts. This course will also provide an overview of measurement concepts as well as the philosophical and theoretical orientation of applied behavior analysis.

## SPSY 525 – Behavior Change and Systems Support

#### 3 credits

This course provides an overview of behavioral assessment, behavior change procedures, generalization programming and systems supports. Students will be expected to conduct a variety of behavior change procedures, as well as demonstrate an understanding of system concerns and system change procedures in the educational setting.

Prerequisite SPSY 524

### SPSY 526 – School-Based Single Subject Research Seminar

#### 2 credit

This course follows from the Introduction to Research Design and Data Analysis course, with an emphasis on multicultural research topics. The course provides students with an opportunity to apply previously learned research skills in developing an idea for a multicultural research project and writing a formal research paper according to APA requirements.

Prerequisite SPSY 524

# SPSY 527 – Ethics and Professional Practice in School Psychology and Behavior Analysis

#### 3 credits

This course will provide training in the ethical application of psychological, educational and behavioral theory and foundations of practice for children in school settings. BACB, NASP, and APA ethical practice, guidelines and standards are discussed as applied to best professional practice. Relevant legal and professional practice standards will be addressed relevant to school psychology and behavior analysis. Relevant issues in supervision in applied behavior analysis will also be discussed.

#### SPSY 530 – Single Subject Research Seminar 3 Credits

#### This course will review single subject research design, with specific emphasis on designing and creating a research study using a single subject design. Students will review the importance of selecting and evaluating interventions, measurement procedures and designing a single subject design to evaluate an intervention.

Prerequisite SPSY 524

#### SPSY 551 – School Psychology Practicum Field Experience Seminar 1 credit

This seminar will provide advanced training in the application of behavioral, 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 functional behavioral assessment. 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, NASP and BACB ethical practice and guidelines and standards are discussed as applied to best practice. Primarily classroom discussion and some lectures will be used. Students will bring case reviews and general experiences to class for discussion. In addition, students will be required to keep a portfolio to document experiences and learning throughout practicum as well as complete a functional behavior assessment.

# SPSY 609 – 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 611 – Curriculum, Instruction and Educational Leadership 3 credits

The purpose of this course is to analyze the relationship between curriculum, instruction, and assessment. Specifically, what is the impact that this relationship has on the educational achievement of students, and what is the school psychologist's role in managing that relationship? Students will be introduced to the principles of curriculum evaluation and adaptation, effective instruction, and the use of assessment data to make informed instructional and curricular changes to improve student achievement. The ultimate goal is that participants develop the skills necessary to become assessment and instructional leaders within the schools. Students will develop leadership skills by becoming familiar with legal issues that drive educational practices on the state and national level. They will be introduced to resources available through the state and federal governments as well as through professional organizations. Methods include readings, audio and video presentations, lectures, cooperative learning groups, and discussions. Students will be required to produce written products, give presentations, complete a professional project and take a written exam.

## SPSY 613 – 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 614 – Multicultural Issues in Psychology

#### 3 credits

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 615 – Assessment II: Psycho-Educational Assessment of the Exceptional Learner

#### 3 credits

This is the second course in the assessment sequence and 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 616 – 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 617 – 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 618 – Assessment III: Behavioral and Social Emotional Assessment 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 619 – 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 620 – 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 621 – Health Psychology and Medicine Applied to Schools 1 credit

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 623 – English Learners: Educational Implications and Accommodations 3 credits

This course explores strategies for supporting English Language Learners (ELLs) in formal and informal educational settings. Students are introduced to foundational theories and current research on social and academic factors that influence ELLs' learning experiences. Emphasis is placed on instructional approaches to support teachers working with linguistically and culturally diverse English Language Learners.

## SPSY 652 – Practicum Seminar in School Psychology: Applied Law and Ethics 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. This Practicum Seminar emphasizes legal and ethical issues inherent in the practice of school psychology.

# SPSY 653 - Practicum Seminar in School Psychology: 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. This Practicum Seminar 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 654 – Practicum Seminar in School Psychology: 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 this Practicum Seminar is on establishing effective home-school relationships within the context of school psychological service delivery.

## SPSY 661, 662, 663 – School Psychology Internship Seminar I, II, and III 2 credits each term (Fall, Winter and Spring)

This year-long internship and bimonthly college-based seminar services as the culminating training experience for the specialist-level School Psychology certification 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 psycho-educational 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.

## SPSY 720 – Early Intervention and Assessment 1 credit

This elective 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 730 – 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 731 – Ethics and Professional Issues in Psychology 3 credits

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 732 –Child and Adolescent Psychopathology 3 credits

At the conclusion of this course, students will have an understanding of developmental considerations, risk and resilience factors, empirical research, educational implications, and access to resources for the major psychological disorders relevant to children and adolescents. The roles of physical, motor and cognitive growth, as well as social and affective behavior, will be explored as they relate to abnormal psychological behavior throughout the lifespan. In addition, multicultural and socioeconomic factors will be discussed in relation to developmental issues. Students will be able to utilize the Diagnostic and Statistical Manual of Mental Disorders – fifth edition (DSM-5) and its framework in addressing issues in child and adolescent psychopathology. Students will also be familiar with relevant changes that have occurred between DSM-IV-TR and DSM-5. Active learning will occur through role playing, classroom activities, and group discussions.

#### SPSY 733 – History and Systems

#### 3 credits

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 734 – Multicultural Community School Psychology 3 credits

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 735 – Advanced Assessment and Prevention/Intervention 3 credits

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 735P – 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 736 – Cognitive Behavior Therapy I 2 credits

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 three-course sequence.

#### SPSY 737 – Cognitive Behavior Therapy II

#### 2 credits

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 738 – CBT in the School: Practicum

#### 2 credits

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 740 – Social Psychology and Group Process

#### 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 concepts and theories related to group process.

## SPSY 741 – Neuropsychology in the Schools 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 741P – Practicum in Neuropsychology in the Schools

#### 1 credit

This practicum experience is provided in conjunction with SPSY 641 Neuropsychology in the Schools. 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 744 – Consultation in Home, School and Community Settings 2 credits

This course is intended to be an extension of the knowledge and skills acquired in schoolbased 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 745 – Issues in Supervision and Administration

#### 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 746 – 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 747 – Neuropathology

#### 1 credit

This elective 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 748 -Biological Bases of Behavior

#### 1 credit

This first year course reviews the biological underpinnings of behaviors including neural, physiological, anatomical, and genetic and heritable aspects of behavior. This course will emphasize the study of neuroanatomy, the nervous system, the endocrine system, sensation and perception, evolutionary biology, the senses, movement, hunger, and sleep-arousal rhythms.

#### SPSY 749 – Social Bases of Behavior

#### 2 credits

This graduate level course will introduce students to the theoretical perspectives, research methods, and empirical findings in contemporary social bases of behavior. Social psychology is the scientific study of how people's thoughts, feelings, attitudes, and behaviors are affected by the real or imagined presence of others. More specifically, the course will cover group processes with the school environment, how personal attributions are created and/or sustained, and how discrimination is learned and supported throughout a culture. The major concepts discussed will help students think critically about social aspects and influences of behavior.

### SPSY 750 – Life Span Development Theories

#### 1 credit

This course will examine the preeminent theories that provide the framework for understanding development across the lifespan. Included will be both classical and contemporary theories that cover all aspects of development, including social, cognitive, emotional, biological, and language. By critically reviewing these theories, students will be able to effectively apply them to understanding the whole persona in multiple phases of development.

#### SPSY 751 -- Affective Bases of Behavior

#### 1 credit

This course reviews basic research related to the influence of affect, mood, and emotion on human behavior. Specific topics to be addressed include social learning theory, motivation, self-efficacy, social influence, resilience, and positive psychology.

#### SPSY 752 Qualitative Analysis

#### 1 credit

This course will focus on the conceptualization, collection, and interpretation of qualitative data. The qualitative approach examines various phenomenon from the perspective of the research participant and seeks to understand the meanings and lived experiences of specific groups of individuals. Adopting more naturalistic methods (e.g., interviewing, observation, ethnography, participant observation, and focus groups) students will learn to apply grounded theory to the data they collect.

## SPSY 753 Program Evaluation 1 credit

This course will prepare 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. 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 760 –Advanced Integrative Practicum in Applied Cognitive Development 1 credit

The Advanced Integrative Practicum in Applied Cognitive Development is the start to a three-semester integrative practicum experience that provides the opportunity to gain exposure to, and experience in, the integration of assessment and intervention techniques across the various settings and roles in which the provision of psychological services occurs. The primary focus during this advanced practicum will be in applying knowledge of cognition and development to applied settings. Case presentations and consultation with be a vital component to this process.

# SPSY 761 – Advanced Integrative Practicum in Applied Social –Emotional Development

#### 1 credit

The Advanced Integrative Practicum in Applied Social-Emotional Development is the second of a three-semester integrative practicum experience that provides the opportunity to gain exposure to, and experience in, the integration of assessment and intervention techniques across the various settings and roles in which the provision of psychological services occurs. The primary focus during this advanced practicum will be in applying knowledge of social processes, affective basis of behavior, and development to applied settings. Case presentations and consultation with be a vital component to this process.

# SPSY 762 – Advanced Integrative Practicum in Applied Health Psychology 1 credit

The Advanced Integrative Practicum in Applied Health Psychology is the third of a threesemester integrative practicum experience. This term provides practicum students with the opportunity to apply knowledge of common pediatric health conditions and factors that impact the relationship between children's physical health, socio-emotional wellbeing, and academic functioning. Prevention and wellness promotion will be highlighted, as will racial, ethnic and cultural factors which impact children's access to health care services. Child health-related legal issues, ethical practice, and professional development will also be emphasized. Case presentations and consultation with be a vital component to this process.

## SPSY 763 – Practicum Applied Law and Ethics 1 credit

In conjunction with coursework, students complete a year-long practicum sequence in the schools. 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. This Practicum Seminar emphasizes legal and ethical issues inherent in the practice of school psychology.

# SPSY 764 – Practicum Seminar School Structure and Organization 1 credit

In conjunction with coursework, students complete a year-long practicum sequence in the schools. 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. This Practicum Seminar focuses on school structure and organization, with emphasis on implementation of school-wide problem-solving modelsfor identifying and addressing students' academic and social/emotional/behavioral needs.

## SPSY 765 – Early Intervention and Assessment

#### 1 credit

In conjunction with coursework, students complete a year-long practicum sequence in the schools. This field is focused on informal intervention practices, including assessment, consultation, counseling, informal assessment and academic 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 this Practicum Seminar is on establishing effective home-school relationships within the context of scholl psychological service delivery.

#### SPSY 771 -- Integrative Seminar in Cognitive Development 1 credit

This second year course will focus on the integration of the cognitive bases of behavior and lifespan development. By examining increasingly complex cognitive processes from the first appearance of sensory and perceptual abilities, this course will follow both the behavioral and theoretical development of cognition and its impact on behavior.

#### SPSY 772 -- Integrative Seminar in Social-Affective Development 1 credit

This second year course will focus on the integration of the social-affective bases of behavior and lifespan development. Starting with the development of an infant's first and most important relationship, this course will follow the development of individuals' social and affective behavior from infancy through late adulthood and discuss the theoretical models of these behaviors.

# SPSY 773 -- Integrative Seminar in Biological and Physiological Development 1 credit

This second year course will focus on the integration of the biological and physiological bases of behavior across the lifespan. This course will begin examining the development of critical biological and physiological processes from conception and follow these through childhood adolescence, and adulthood. This course will focus on the major biological systems including the neurological and endocrine systems as well as the development of sensation and perception.

#### SPSY 779 – Externship

### 1 credit each term (Fall, Winter and Spring)

This year-long school-based externship and bimonthly college-based seminar serve as the culminating training experience for the specialist-level certification in school psychology. It is a comprehensive field and classroom experience through which externs are required

to integrate the knowledge base and applied skills of school psychology. A major goal of this course will provide externs the opportunity to present and receive feedback on individual cases and experiences.

## SPSY 781 – Psychopharmacology

#### 1 credit

This elective 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 782 – Group Therapy in the Schools

#### 1 credit

This elective 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 the developmental stage of the treatment.

Prerequisites: SPSY 736, SPSY 737 and SPSY 738.

### SPSY 783 – Research I: Design and Methods

#### 3 credits

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 and apply this mindset to the evaluation of clinical interventions and educational programs. Upon completion of this course, students will have gained experience in writing a research proposal, translating research problems into testable hypotheses, and considering ethical, professional, and diversity issues related to conducting research with human participants.

#### SPSY 784 – Research II: Statistics

#### 3 credits

This course is designed to teach students essential concepts in planning,

selecting, and conducting and interpreting statistical analyses. Course content includes a review of the application of psychometry, basic descriptive statistics, hypothesis testing, correlation, and univariate, multivariate and nonparametric data analysis techniques and accompanying statistical tests of significance. Qualitative research design and analysis will also be discussed briefly. Data analyses and classroom demonstrations of data analyses will be conducted with SPSS software.

Prerequisite SPSY 783

# SPSY 785 – Research III: Qualitative Research and Dissertation Design/Methodology 3 credits

This course is designed to increase students' knowledge of the wide array of research methods (e.g., qualitative, etc.) and designs available for conducting dissertation research

and to increase students' knowledge of the issues related to development, use, and interpretation of psychometric instruments. Over the course of the term, students will be expected to formulate a problem for research, develop hypotheses that address the problem in a testable manner, identify pertinent research literature that will be used in writing the dissertation literature review, and consider research methodologies suited to the testing of hypotheses. Ideas for topics relevant to various areas of school psychology will be introduced weekly.

Prerequisites: SPSY 783 and SPSY 784.

#### SPSY 700 – Introduction to Internship Seminar – 0 credit

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SPSY 786 – Internship Seminar I – 1 credit
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SPSY 787 – Internship Seminar II – 1 credit
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SPSY 788 – Internship Seminar III – 1 credit

#### SPSY 701 – Internship – 0 credits

These seminars are for five semesters requiring additional hours at an internship site doing psychotherapy, consultation, intervention, evaluation, psychological assessment and other work appropriate to the role of a psychologist.

Prerequisite: Successful completion of comprehensive exam and all coursework.

#### SPSY 790 – Dissertation Seminar

#### 1 credit each term (Fall, Winter, and Spring)

#### Total 3 credits

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 the proposal and final approval of the dissertation.

Prerequisite: Successful completion of comprehensive exam.

## SPSY 791 – Cognitive and Affective Bases of Behavior 3 credits

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 792 – Dissertation

#### 1 credit

After completion of the three 1 credit Dissertation Seminars, 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.

#### SPSY 796 – Objective Comprehensive Examination SPSY 797 – Written Comprehensive Examination

#### Not for credit

Required examination for the program: Students must successfully complete this exam in addition to all coursework to be able to begin internship and dissertation.

#### SPSY 798 – Special Topics: Autism 1 credit

This course will provide an overview of contemporary evidence- based assessment and treatment procedures for social communication deficits and challenging behaviors associated with Autism Spectrum Disorder. Behavior support strategies, educational programming, skill building, and communication strategies will be reviewed. Data collection and progress monitoring procedures to determine effective assessment and intervention and family support planning will also be reviewed.

### SPSY 799 – Special Topics in Multicultural Principles

#### 1 credit

The purpose of this elective course is to expose doctoral-level students to different counseling and psychotherapy techniques within a pluralistic society. Each class is dedicated to researching, discussing, and applying evidenced-based practices to culturally diverse populations. A wide variety of topics will be discussed: counseling techniques, religious/spiritual experiences, disabilities, etc. Case studies will be required and presented as part of the classroom sessions.

Prerequisite: SPSY 634.

### **COURSE SEQUENCE**

### <u>Certificate of Graduate Studies and Certificate of Advanced Graduate</u> <u>Studies – Philadelphia Campus ON LINE PROGRAM</u>

### Applied Behavior Analysis

### First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
ABA 524	. Basic Principles in Applied Behavior Analysis	
	Total Credits	3

#### TERM 2 (WINTER)

Course No	Course Title	Credits
ABA 528	.Behavioral Assessment	3
ABA 530	.Single Experimental Design for the Science and Practice	
	of Applied Behavior Analysis	3
	Total Credits	6

#### TERM 3 (SPRING)

Course No	Course Title	Credits
ABA 525	Behavior Change and Systems Support	3
ABA 529	Advanced Seminar in Assessment & Treatment of	
	Pediatric Behavior & Neurodevelopmental Disorders .	3
	Total Credits	6

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## COURSE DESCRIPTIONS

### Applied Behavior Analysis – Philadelphia Campus ON LINE PROGRAM

#### ABA 524 – Basic Principles in Applied Behavior Analysis 3 credits

This is an introductory course that provides an overview of the basic principles of behavior as they related to Applied Behavior Analysis (ABA). Students will be provided with an overview of the philosophical and theoretical foundations of ABA, essential characteristics of ABA, and the history of basic and applied principles, processes, and concepts that inform the professional practice of ABA. This course also will provide an overview of measurement concepts.

#### ABA 525 -- Behavior Change and Systems Support

3 credits

This course provides a review of behavior assessment procedures, behavior change procedures, generalization programming, and systems supports. Students will be expected to demonstrate proficiency in a variety of behavior change procedures, as well as demonstrate an understanding of system concerns and system change procedures in the educational setting. Topics focusing on consultation with teachers and parents, as well as ethical principles in behavior change will be reviewed.

#### ABA 527 – Legal, Ethical, & Professional Practice in Behavior Analysis 3 credits

This course will provide training in Behavior Analyst Certification Board (BACB) ethical practice guidelines and standards. Relevant legal and professional practice standards will be addressed relevant to the professional practice of behavior analysis. Relevant issues in supervision of behavior analysts and behavioral analysts in training will also be discussed.

#### ABA 528 – Behavior Assessment

#### 3 credits

This course will provide students with an overview of behavior assessment procedures to determine appropriate educational and behavioral programming. Upon completion of this course, students will be able to utilize a variety of assessment strategies to assist with supporting students and developing interventions in applied settings.

# ABA 529 – Advanced Seminar in Assessment & Treatment of Pediatric Behavior & Neurodevelopmental Disorders

#### 3 credits

This course will provide an overview of contemporary assessment and treatment procedures for challenging behaviors related to pediatric behavior and neurodevelopmental disorders. Emphasis will be placed on the use of idiographic behavior analytic assessment and derived treatment procedures. Specific topics will vary by term, but may include psychopharmacology and evaluation of medication for challenging behavior, assessment and treatment of restrictive and repetitive behavior, assessment and intervention related to verbal behavior, assessment and treatment of problem behavior related to subtypes of common reinforcement contingencies that maintain problem behavior. Behavior support strategies, educational programming, skill building, and communication strategies will be reviewed. Data collection and progress monitoring procedures to determine effective assessment and intervention and family support planning will also be reviewed.

#### ABA 530 – Single Case Experimental Design for the Science and Practice of Behavior Analysis

#### 3 credits

This course will review single subject research design, with specific emphasis on the use of single subject experimental designs for evaluating behavior assessment and treatment procedures in applied settings. Students will review the importance of selecting and evaluating interventions, measurement procedures, and single subject experimental design to evaluate an intervention.

### PROGRAMS OF STUDY

### <u>Organizational Development and Leadership (MS)</u> <u>– Philadelphia Campus</u>

#### Organizational Development and Leadership - Master of Science (MS)

Designed for the working professional, the Master of Science in Organizational Development and Leadership program uses a unique combination of organization development theory and individual self-discovery to provide an essential leadership perspective.

This dynamic 36-credit action learning program is designed to integrate psychological theory and action research to enhance the skills, competencies and techniques of organizational leaders as practitioner scholars.

The program prepares adult learners to better understand organizations as dynamic systems. The integration of "theory-in-practice" supports intentional inquiry, discovery and intervention design processes necessary to support the development and health of the organization at individual, group and organization levels. The philosophy and practice of the program is to teach adult learners to take a "whole systems" approach to inquiry and intervention design, realizing that when there is an intervention in any one part of an organization's system, there is impact on the whole system. Coordinated by the Department of Psychology, the coursework is scheduled on weekends at the Philadelphia Campus. A graduate certificate in organizational development and leadership is offered on both campuses.

#### Organizational Development and Leadership Certificate of Graduate Studies or Certificate of Advanced Graduate Studies.

#### – Philadelphia and Georgia Campus

These certificate programs provide students with a better understanding of organizations as dynamic systems and provide the adult learner with insight into a "whole systems" approach to inquiry and intervention design, realizing that when there is an intervention in any one part of an organization's system, there is impact on the whole system. A total of 12 credits are required for completion of either of these certificates.

#### Biomedical Science Organizational Leadership concentration – Philadelphia and Georgia Campus

This program provides students who entered in the first year as a Biomedical Science student to pursue a concentration in Organizational Development and Leadership in their second year of their program.

This concentration is a total of 21 credits beyond the first year of their Biomedical Science. Requirements for this Concentration can be found under biomedical Science section.

## **COURSE SEQUENCE**

### <u>Master of Science – Organizational Development and Leadership (MS)</u> <u>– Philadelphia Campus</u>

Eight Required Courses:

Course No	Course Title	Credits
ODL 501	. Foundations and Systems	
	of Organizational Development	3
ODL 505	. Team Dynamics	
or		
ODL 523	. Adventure Leadership: Building Teams the Natural	
	Way (Elective)	3
ODL 508	. Leadership for Practitioners	3
	. Capstone (completed in the last term)	
ODL 514	. Managing Emotional Systems in the Workplace	
or		
ODL 518	. Ethical Effectiveness (Elective)	3
ODL 516	. Developing Systems Literacy: Organizational	
	Workshop	3
ODL 517	. Communication Skills for Leaders	
	. Managing Strategic Change: Diagnosis and	
	.Intervention	3
	Total Credits	
	Iotur Creates	
Total credits required	l for degree completion	36

Course No	Course Title	Credits
ODL 504	Personal and Professional Development	3
	Team Dynamics	
	Social Factors and Cultural Diversity	
	. Action Research in ODL	
ODL 512	Small and Large Systems Diagnosis and Change	3
ODL 514	Managing Emotional Systems in the Workplace	3
ODL 515	Project Management and Strategic Thinking	3
ODL 518	. Ethical Effectiveness	3
ODL 519	Strategic Change: Planning for Organizational Success .	3
ODL 520	. Appreciative Inquiry	3
	Leader as Meeting Designer	
ODL 523	Adventure Leadership	3
	Coaching Skills for Leaders	
ODL 525	Consulting Skills for Community Engagement	3
ODL 526	Managing Self and Emotional Systems in the Workplac	e3
ODL 530	Special Topic	3
	Total Credits for Electives	12

Total credits required for	degree completion	 36

## COURSE SEQUENCE

### Organizational Development and Leadership Certificates

Four courses under advisement with Program Director

Biomedical Sciences – Organizational Leadership Concentration Philadelphia and Georgia Campuses requirements can be found under Biomedical Science section of the catalog.

### COURSE DESCRIPTIONS

### <u>Organizational Development and Leadership (MS)</u> <u>– Philadelphia Campus</u>

## 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 models of organizational change that can be applied immediately to the student's work setting.

#### ODL 504 – Personal and Professional Development

#### 3 credits

This course is an exploration of development from three viewpoints – personal, interpersonal and organization. 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; and 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: Action Research 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: Action Research Project.

#### ODL 508 – Leadership for Practitioners 3 credits

This course provides an overview of leadership and organization development practitioner models that effectively lead organizations through the change process. A key focus of the course is to enhance the reflective practice of the adult learners by integrating organization diagnostic models presented in class; design aligned interventions that enhance individual, relational and organizational health; and coach learners to achieve higher practice performance within their respective organizations.

#### ODL 510 – Capstone: Action Research Project 3 credits

The Capstone course is taken in the last year of the student's master's degree work. Working with the program director as her/his advisor, the student demonstrates her/his competence in leading organizational change. Students write an action research paper from an actual or theoretical practice perspective describing how they would engage in organizational diagnosis to clarify the current organizational or business challenge, design an intervention(s) appropriately aligned with the organization diagnosis, and practice use of self as an instrument of change to achieve the desired individual and organizational results.

## ODL 512 – Small and Large Systems Diagnosis and Change 3 credits

This course gives students an awareness, understanding and practice of how to diagnose organizational effectiveness and then plan and implement complex

change. Diagnostic models will be introduced as instruments used to identify issues impacting the performance and effectiveness of the organization at the individual, group and system levels. As a critical learning process, the students will learn the importance of use of self as an instrument for organizational diagnosis and change; engaging the whole system as an intentional process to promote system-wide understanding of the issues; assessing system change readiness; and aligning, designing and implementing appropriate interventions with the organizational diagnosis.

## ODL 514 – Managing Emotional Systems in the Workplace

#### 3 credits

This course develops the students' ability to be more effective in leading change in the workplace by increasing their ability to manage their 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

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 517 – Communication Skills for Leaders 3 credits

This course introduces a comprehensive set of communication skills available to leaders including theoretical background, practical applications and on-camera practice sessions delivering critical messages to diverse audiences. Students will examine core components of messaging and powerful presentations in organizational settings, including media applications. Students will learn how to effectively communicate from organizational and individual settings, including creating an organizational communication plan.

#### 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.

## ODL 519 – Strategic Change: Planning for Organizational Success 3 credits

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. 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

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 surface 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. One way the principles and practices of AI will

come alive is by students applying the methodology to their own growth and development as leaders of change.

# ODL 522 – Leader as Meeting Designer and Facilitator 3 credits

Meetings are where collaboration happens. Well-planned, designed and facilitated meetings tap a variety of different perspectives, expand everyone's understanding of the situation, and increase the likelihood of good, effective decisions that benefit the system – the common good. The purpose of the course is to become familiar with basic concepts, to practice the skills and methods, and to develop the habits of mind essential to designing and facilitating task-focused, collaborative meetings.

## ODL 523 – Adventure Leadership: Building Teams the Natural Way 3 credits

In today's fast-moving global arena, it is vital to develop and sustain an internal atmosphere of trust, personal empowerment, leadership and teamwork. The most powerful and sustainable learning comes from direct, relevant, concrete experiences. Our professional facilitators draw on their time-tested experience in the field of action learning to instruct the student in his/her unique approach to building high-performing teams. Students and their team work through the dynamics of this course, and will discover more effective, sustainable solutions to help them build powerful teams and accomplish greater goals. As learners, the student will experience: 1) Enhanced competency development in self- awareness and reflective practice through the intentional use of self as an instrument for change; 2) Learn and practice what it means to lead individually and in a group experience as he/she discovers his/her leadership stance around collaboration; 3) Learn and practice different coaching and peer mentoring techniques in challenging scenarios; and 4) Practice assessment, diagnosis and intervention design skills necessary to engage as an evolving high-performance team.

#### ODL 524 – Coaching Skills for Leaders

#### 3 credits

This course provides an introduction to coaching for leaders. We will explore the definition and framework for leadership coaching, learn coaching approaches and provide opportunities to practice, utilizing workplace situations. We will emphasize learning how to be fully present when coaching and how to focus attention to maximize the coaching interaction. Course objectives include direct competency development in the following areas: 1) Learn and practice coaching techniques that will improve reflective practice and deliver key learnings to enhance the impact of leaders in their diverse organizational cultures; 2) Develop an in-depth awareness and understanding of managing polarities that surface in an organization's culture that will enable the leader to effectively develop and collaboratively engage others in the process of change; 3) Learn and practice data collection processes through the intentional use of self as a participant/observer to enhance individual and organizational results; and 4) Enhance communication skills by learning and applying non-verbal movement- based approaches as a holistic framework for data collection and intervention design for leaders. No movement or dance experience is necessary.

#### ODL 525 – Consulting Skills for Community Engagement 3 credits

This course provides an opportunity for adult learners to engage in a community consulting project wherein they can advance their consulting and intervention skills and enhance PCOM's presence and commitment to the community.

The project will demonstrate the leaders' ability to: think strategically, manage projects, behave ethically, develop self, and build teams employing the following elements: 1) Demonstrate understanding of how to build core inclusion skills critical for building relationships and effective teams to create an environment where all parties feel respected and able to work up to individual potential; 2) Model organizational principles and values to leverage them for creativity, risk taking, decision making, and enhanced organizational performance; 3) Create action steps to identify and build skills that increase the effectiveness of team interactions and overall organizational performance; and 4) Analyze organization culture and see the connection between leadership behavior and the impact on teams and organizational goals.

## ODL 526 – Managing Self and Emotional Systems in the Workplace 3 credits

This course is an exploration of development from three viewpoints – personal, interpersonal and organization. Students will examine their own preferences, strengths and motivations as well as the role these play in their relationships and leadership style for managing change. Students discover their own patterns of reactivity and identify how they can diffuse a toxic situation by changing their own behavior.

# ODL 527 – Managing Strategic Change: Diagnosis and Intervention 3 credits

This course gives students an awareness, understanding, and practice of how to diagnose organizational effectiveness and then plan and implement complex change. Students will explore a range of diagnostic models for evaluating the performance and effectiveness of the organization at the individual, group and system levels. Students will learn tools and approaches for implementing change initiatives that range from developmental to transformational in scope, and will understand what is needed from various constituencies (leaders, change agents, and other stakeholders) for effective realization of results. Students will also learn the importance of: use of self as an instrument for organizational diagnosis and change; engaging the whole system to promote system-wide understanding of the issues; and assessing system change readiness.

## ODL 530 – Special Topics in ODL

#### 3 credits

The field of organization development, change and leadership continues to evolve and grow through a spirit of action research inquiry yielding new discovery by global scholar practitioners. This course explores emergent theory and practice in the field of organization development, change and leadership and the implications for improving individual and organizational performance and results. Actual topics will be chosen by the professor(s) and may vary from term to term.

### <u>Certificate of Graduate Studies – Organizational</u> <u>Development and Leadership (CGS)</u>

### <u>Certificate of Advanced Graduate Studies – Organizational</u> <u>Development and Leadership (CAGS)</u> <u>– Georgia Campus</u>

## ODL 501G – 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 models of organizational change that can be applied immediately to the student's work setting.

#### ODL 505G – 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 506G – 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 508G – Leadership for Practitioners

#### 3 credits

This course provides an overview of leadership and organization development practitioner models that effectively lead organizations through the change process. A key focus of the course is to: enhance the reflective practice of the adult learners by integrating organization diagnostic models presented in class; design aligned interventions that enhance individual, relational and organizational health; and coaching learners to achieve higher practice performance within their respective organizations.

### ODL 510G - Capstone: Action Research Project

#### 3 credits

The Capstone course is taken in the last year of the student's master's degree work. Working with the program director as her/his advisor, the student demonstrates her/his competence in leading organizational change. Students write an action research paper from an actual or theoretical practice perspective describing how they would engage in organizational diagnosis to clarify the current organizational or business challenge, design an intervention(s) appropriately aligned with the organization diagnosis, and practice use of self as an instrument of change to achieve the desired individual and organizational results.

#### ODL 517G – Communication Skills for Leaders 3 credits

This course introduces a comprehensive set of communication skills available to leaders including theoretical background, practical applications and on-camera practice sessions delivering critical messages to diverse audiences. Students will examine core components of messaging and powerful presentations in organizational settings. Students will learn how to effectively communicate from organizational and individual settings, including creating an organizational communication plan.

#### ODL 520G – Appreciative Inquiry

#### 3 credits

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 surface 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. One way the principles and practices of AI will come alive is by students applying the methodology to their own growth and development as leaders of change.

## ODL 522G – Leader as Meeting Designer and Facilitator 3 credits

This course introduces the idea that effective group decision-making doesn't just happen but takes careful planning and delivery by a skilled facilitator. The purpose of this course is for students to understand the values and dynamics of collaborative decision-making, to develop an awareness of the qualities and skills of an effective facilitator, to learn three specific methods for participatory decision-making and to practice the design of collaborative decision-making sessions.

# ODL 526G – Managing Self and Emotional Systems in the Workplace 3 credits

This course is an exploration of development from three viewpoints – personal, interpersonal and organization. Students will examine their own preferences, strengths and motivations as well as the role these play in their relationships and leadership style for managing change. Students discover their own patterns of reactivity and identify how they can diffuse a toxic situation by changing their own behavior.

# ODL 527G – Managing Strategic Change: Diagnosis and Intervention 3 credits

This course gives students an awareness, understanding, and practice of how to diagnose organizational effectiveness and then plan and implement complex change. Students will explore a range of diagnostic models for evaluating the performance and effectiveness of the organization at the individual, group and system levels. Students will learn tools and approaches for implementing change initiatives that range from developmental to transformational in scope, and will understand what is needed from various constituencies (leaders, change agents, and other stakeholders) for effective realization of results. Students will also learn the importance of use of self as an instrument for

organizational diagnosis and change; engaging the whole system to promote system-wide understanding of the issues; and assessing system change readiness.

#### ODL 530G – Special Topics in ODL

#### 3 credits

The field of organization development, change and leadership continues to evolve and grow through a spirit of action research inquiry yielding new discovery by global scholar practitioners. This course explores emergent theory and practice in the field of organization development, change and leadership and the implications for improving individual and organizational performance and results. Actual topics will be chosen by the professor(s) and may vary from term to term.

## PROGRAM OF STUDY

## <u>Public Health Management and Administration (MS) and Certificate of</u> <u>Graduate Studies and Certificate of Advanced Graduate Studies</u> <u>– Philadelphia Center City Site</u>

#### Program Offered at Center City Site - 1500 Market Street, Philadelphia, PA

The purpose of the Master of Science (MS) and Certificates in Public Health Management and Administration(PHMA) programs is to provide leaders and high potential individuals with competency-based master degree level coursework that prepares participants to more effectively lead organizations in the evolving landscape of public health and its expanding portfolio of practice. Included in the curriculum is a better understanding of how to successfully manage change in order to support organizations as they continue to change and grow. The program's action learning orientation develops leaders who:

- 1) have an understanding of public health management systems and ideology;
- 2) embrace collaboration to achieve desired results;
- 3) have the ability to lead organizational change; and,
- engage in reflective practice to continually develop and enhance their performance as practitioner-scholars.

#### Philosophy and Practice

The philosophy and practice of the PHMA program is to teach learners to take a "whole systems" approach to public health management and administration, including applied principles of innovation and styles of inquiry, data collection and utilization, and evidence-based practice to inform decision making. The program leverages action learning in a unique combination of organizational theory and individual self-discovery that lend to a perspective that points to essential principles of public health management and administration. Intentionally designed as a cohort-based learning experience for the working professional, the program prepares learners to better understand organizations as dynamic systems. The integration of "theory-in- practice" supports intentional inquiry, discovery and intervention design processes necessary to support the development and sustainability of the organization at individual, program and system levels.

The Master of Science is a 36 credit program and the certificates require 12 credits.

### Public Health Management and Administration (MS) – Philadelphia Center City Site

11 Required Courses:

Course No	Course Title	Credits
PHMA 501	. Intro to Public Health Systems	3
PHMA 502	. Foundations in Design: Organization Behavior	
	and Change	3
PHMA 503	. Managing and Leading Public Health Organizations	
	Part One: Elements of Nonprofit Organizations	
PHMA 504	Collaboration in Complex Systems	3
PHMA 505	. Managing and Leading Public Health Organizations	
	Part Two: Financial: Planning and Complex Budgets in	
	Public Health	3
PHMA 506	.Public Policy, Law and Innovation	3
	.Cultural Diversity in Population and Partners	
PHMA 508	.Manager's Use of Data: Evidence-Based Practice to Inform	n
	Decision Making	3
PHMA 509	.Strategic and Professional Communication Skills for Succ	cessful
	Leaders	3
PHMA 510	.Leader as Process Designer and Facilitator	3
PHMA 511		3
	Total Core Curriculum Credits	

Elective Choose one from the following:

Course No	Course Title	Credits
PHMA 512	.Technology as Tool for Innovation and Maximizing	
	Capacity Consulting Skills for Leaders	3
PHMA 513	.Leveraging Relationships to Advance Your Mission	3
PHMA 520	.Appreciative Inquiry (PCOM Site)	3
PHMA 524	. Coaching Skills (PCOM Site)	3
	Total Elective Credits	3
Total credits required	l for ODL Concentration completion	21

total eleans required for ODE concentration completion

## <u>Certificate of Graduate Studies Public Health Management and</u> <u>Administration – Philadelphia Center City Site</u>

18 Required Credits

Course No	Course Title	Credits
PHMA 502	.Foundations in Design: Organization Behavior and Chan	1ge3
PHMA 503	Managing and Leading Public Health Organizations	
	Part One: Elements of Nonprofit Organizations	
PHMA 504	.Collaboration in Complex Systems	3
PHMA 505	Managing and Leading Public Health Organizations	
	Part Two: Financial Planning and Complex Budgets in	
	Public Health	
PHMA 506	.Public Policy, Law and Innovation	3
Total Required Credits		
Elective choose any o	other PHMA course	3
Total Credits for Certificate Graduate Studies PHMA		

## <u>Certificate of Advanced Graduate Studies Public Health Management</u> <u>and Administration – Philadelphia Center City Site</u>

12 Required Credits

Course No	Course Title	Credits
	.Managing and Leading Public Health Organizations Part One: Elements of Nonprofit Organizations	3
PHMA 505	Managing and Leading Public Health Organizations. Part Two: Financial Planning and Complex Budgets in	
	Public Health	3
PHMA 506	.Public Policy, Law and Innovation	3
	Total Required Credits	
PHMA 502	e of the following courses Foundations in Design: Organization Behavior and Chan	0
PHMA 504	.Collaboration in Complex Systems	3
Total credits for Cert	ificate of Advanced Graduate Studies	12

## COURSE DESCRIPTIONS

## Public Health Management and Administration (MS) – Philadelphia Center City Site

## PHMA 501 – Intro to Public Health Systems 3 credits

This course will provide an overview of core disciplines and theories in public health learning and practice, including behavioral and community assessment, program development evaluation, policy and advocacy, and environmental and occupational health. Learners will also begin to understand the management and administration principles that define this degree, with a particular focus on business and sustainability.

# PHMA 502 – Foundations in Design: Org Behavior and Change 3 credits

This course is an introduction to the dynamics of organization behavior, organization development, and the creation of intentional physical space design elements to foster collaboration and high performance. Adult learners learn and understand the importance of using themselves as an intentional instrument of change as a foundation for their leadership practice. The course introduces a consulting model and several models of organizational change that can be practiced inside the class laboratory and applied immediately to the adult learner's work settings.

# PHMA 503 - Managing and Leading Public Health Orgs - Part One: Elements of Nonprofit Orgs

#### 3 credits

Part One of the Managing and Leading Public Health Orgs course is designed to address business structures and processes in the not-for- profit environment, grant development processes, ethical and social responsibility, and risk management.

# PHMA 504 – Collaboration in Complex Systems (Winter Term) 3 credits

This course focuses on helping adult learners see the systemic conditions in which they live and work. An important purpose of the course is to provide an understanding of what is needed to create powerful human systems – systems with outstanding capacity to perform their functions and carry out their mission. During the first day of the course, students will be immersed in a "living case study" of organizational life as related to complex systems. This experience and the related frameworks will provide the basis for exploring issues of empowerment, partnership and collaboration.

# PHMA 505 – Managing and Leading Public Health Orgs – Part Two: Financial Planning and Complex Budgets in Public Health 3 credits

## 3 credits

Part Two of the Managing and Leading Public Health Orgs course is designed to address financial concepts and strategies that can support and sustain public health organizations in today's environment. Accounting and budgeting practices will be covered in addition to a more macro perspective on cash and fundability.

# PHMA 506 – Public Policy, Law and Innovation 3 credits

This course helps leaders to think with a whole system approach as they develop and implement innovative policies that facilitate change and identify strategies and processes to successfully implement the policies. Students in this course will understand that the innovation process includes the importance of working collaboratively with all stakeholders: policy decision-makers within all levels of government; funders; and, providers with a variety of constituent viewpoints and interests. As leaders, students will be introduced to and learn the legal rights and responsibilities of stakeholders in public health systems. In addition, students will learn to analyze different aspects of the evolving landscape of judicial rulings, including legislative and administrative regulations that impact public health systems.

# PHMA 507 – Cultural Diversity in Population and Partners 3 credits

This course identifies culture as the set of shared attitudes, values, goals, and practices that characterizes a community. These communities exist around gender, race, color, age, different-ability, sexual orientation, class, religion, ethnic, and nationality. This course examines differences that characterize people of various communities and what happens when they come together in organizations to fulfill the mission of the organization by delivering services to their diverse partner and population groups. This course will culminate in the development of strategies for engaging people of various cultures more successfully to deliver optimal services to/for internal and external populations.

# PHMA 508 – Manager's Use of Data: Evidence-Based Practice to Inform Decision Making

#### 3 credits

This course is intended as preparation and support for the final Capstone project. It reinforces action research as a critical tenet of public health, 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 performance and results. Adult learners will learn how to appropriately design the data collection methodologies and interventions with the identified organizational issue(s)/problem(s). As a definitive outcome, adult learners will align strategies to improve performance based on evidence-based practice to inform their decision making at these levels: individually, group, system/organization and community.

# PHMA 509 – Strategic and Professional Communication Skills for Successful Leaders

#### 3 credits

This course introduces a comprehensive set of communication skills available to leaders including theoretical background, practical applications and on-camera practice sessions delivering critical messages to diverse audiences. Students will examine core components of messaging and powerful presentations in organizational settings—including media applications.

Students will learn how to effectively communicate from organizational and individual settings, including creating a strategic organizational communication plan.

# PHMA 510 – Leader as Process Designer and Facilitator 3 credits

Meetings are where collaboration happens. Well planned, designed and facilitated meetings tap a variety of different perspectives, expand everyone's understanding of the situation and increase the likelihood of good decisions that benefit the system – the common good. The purpose of this course is to become familiar with basic concepts, to practice the skills and methods, and to develop the habits of mind essential to designing and facilitating task-focused, collaborative meetings while delivering optimal results in projects they are managing.

#### PHMA 511 – Capstone/Practicum: Details TBD

#### 3 credits

The Capstone/Practicum course is taken in the last year of the adult earner's master's degree work. Working with the program director or other faculty as her/his advisor, the learner demonstrates her/his competence in public health management and administration, data collection strategies, designing for improvement and understanding organizational change dynamics that inform decision making at all levels of practice. As an outcome, adult learners will write an action research paper from a real-life practice perspective describing how they would engage in data collection and organizational diagnosis to clarify the current organizational or business challenge, design an intervention(s) appropriately aligned with the organizational diagnosis, and practice use of self as an instrument of change to achieve the desired individual and organizational results.

Electives (one weekend "turbo" format at PCOM or PHMC – connected to Capstone/Practicum)

PHMA 512 – Technology as Tool for Innovation and Maximizing Capacity (PHMC or PCOM site) 3 credits TBD

# PHMA 513 – Leveraging Relationships to Advance Your Mission (PHMC or PCOM site)

#### 3 credits

In this course, leaders will gain a greater understanding of how relationships and the network-based opportunities inherent in the interactions we have with everyone we meet is an important part of leading organizations. Leaders will learn that recognizing transactional possibilities in a variety of settings is a competency that can tremendously enrich a leader's capacity to be successful.

#### PHMA 520 – Appreciative Inquiry 3 credits

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 bestof "what is" to help ignite the imagination of "what could be." The aim is to generate knowledge in such a way as to surface 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. One way the principles and practices of AI will come alive is by students applying the methodology to their growth and developmentas leaders of change.

# PHMA 524 – Coaching Skills for Leaders 3 credits

This course provides an introduction to coaching for leaders. We will explore the definition and framework for leadership coaching, learn coaching approaches and provide opportunities to practice, utilizing workplace situations. We will emphasize learning howto be fully present when coaching and how to focus attention to maximize the coaching interaction. Course objectives include direct competency development in the following areas: 10 Learn and practice coaching techniques that will improve reflective practice and deliver key learnings to enhance the impact of leaders in their diverse organizational cultures; 2) Develope an in-depth awareness and understanding of managing polarities that surface in an organization's culture that will enable the leader to effectively develop and collaboratively engage others in the process of change; 3) Learn and practice data collection processes through the intentional use of self as a participant/observer to enhance individual and organizational results; and 4) Enhance communication skills by learning and applying non-verbal movement- based approaches as a holistic framework for data collection and intervention design for leaders. No mevement or dance experience is necessary.

## PROGRAM OF STUDY

# Aging and Long Term Care Administration (MS) and Certificate – Philadelphia Campus

#### Philosophy and Practice

The philosophy and practice of the ALTCA program is to teach adult learners to take a 'whole systems' approach to the management, design, and implementation of strategies to improve the delivery of long-term care services to older adults. This delivery is not limited to institutional care, but also provides an understanding of policy, payment and system delivery in impacting community-based services. The program leverages the unique combination of long-term care administration with organizational theory and individual self-discovery to provide an essential leadership perspective. Intentionally designed for the working professional in the aging network, the program prepares adult learners to better understand organizations as dynamic systems. The integration of 'theory-in-practice' supports intentional inquiry, discovery and intervention design processes necessary to support the development and health of the organization at individual, group and organization levels.

#### MS Aging and Long Term Care Administration

The requirements for the Master of Science in Aging and Long-Term Care Administration (ALTCA) include the following components: (1) completing 36 credits; (2) successfully completing the AIT administrator in training program and (3) remaining in good standing in the academic community. The ALTCA program is a competency-based program in which competencies are defined and identified within each course.

ALTCA is a 36 credit Master of Science degree and the Certificates are 12 credit hours.

#### Certificate of Graduate Studies of Advanced Graduate Studies

Requirements for these certificates are 12 credits to be discussed with the Program Director. The mission of the Master of Science (MS) in Aging and Long-Term Care Administration (ALTCA) and Certificate programs is to prepare leaders in the art and science of aging, including institutional and community-based administrative services in the field. The program's action learning orientation develops leaders who: 1) have experience and leadership in the aging services network; 2) embrace collaboration to achieve desired results; 3) engage in reflective practice to continually develop and enhance their performance as administrators in the delivery of aging services and 4) enhance the practice, value and professionalism of aging and long-term care services.

### Aging and Long Term Care Administration (MS) – Philadelphia Campus

Four Required Course in Long-Term Care Administration

Course No	Course Title	Credits
ATLA 500	.Clinical Issues in LTC Administration	3
ATLA 501	.Regulatory Issues in LTC Administration	3
ATLA 502	.Administrative Issues in LTC Administration	3
ATLA 590	.Administrator in Training (AIT)*	6
	Total Credits for core	15

\*The program director will determine if the students who previously completed a licensure educational program with AIT meet the requirements for transfer credit on a case-by-case basis. If approved, the student who meets these requirements would substitute two (2) ODL classes for the AIT experience.

Three Required Course in Gerontology

Course No	Course Title	Credits
GERO 501	Gerontology and the Biological Nature of Disease	3
GERO 502	Gerontology Service Delivery	3
CPSY 657	Geropsychology	3
	Total Gerontology credits	9

## <u>Aging and Long Term Care Administration (MS)</u> <u>– Philadelphia Campus</u>

Three Required Courses in Organizational Development and Leadership

Course No	Course Title	Credits
	. Foundations and Systems of Organizational Developmer . Leadership for Practitioners	
	Systems Literacy: Organization Workshop	
	Ethical Effectiveness (Elective)	3
	Total ODL course credits	9

Elective Courses – Choose one course from list below

Course No	Course Title	Credits
ODL 502	Understanding the Business of Organizations	
ODL 504	Personal and Professional Development	
ODL 506	Social Factors and Cultural Diversity	
	Project Management and Strategic Thinking	
ODL 517	Communication Skills for Leaders	
ODL 518	Ethical Effectiveness	
	Appreciative Inquiry (T)	
ODL 530	Special Topics in ODL	
	Total Elective course credits	3

## COURSE DESCRIPTIONS

## <u>Aging and Long Term Care Administration (MS)</u> <u>– Philadelphia Campus</u>

# ATCA 500 – Clinical Issues in LTC Administration 3 credits

This course focuses on the clinical aspects of aging and nursing home administration including gerontology, diseases of aging, issues in death and dying, the delivery of nursing care, clinical nutrition, social services, therapeutic activities, pharmacy delivery and rehabilitation services.

# ALCA 501 – Regulatory Issues in LTC Administration 3 credits

The nursing home industry is one of the most regulated industries in the country. This course focuses on the government's role in policy and regulation formation, the role of government and third party reimbursement, preparation for licensure and inspection and a close examination of federal and state regulations governing the delivery of care.

## ALCA 502 – Administrative Issues in LTC Administration 3 credits

This course examines the role of the administrator in the oversight and management of the non-clinical components of care including risk management, safety, insurance, housekeeping, maintenance, medical records, strategic planning, marketing, public relations, human resources and labor union management.

### ALCA 590 – Administrator in Training (AIT)

#### 6 credits

This course provides 1000 hours of experience as administrator in training in a long-term care facility. Students who are not required to have AIT experience by their state certifying body will substitute 6 credits of ODL electives in lieu of the AIT course. The supervision of students in facility placements will be provided by the ALTCA co-directors. The ALTCA co-directors will assist in facilitating placement in AIT settings.

# GERO 501 – Gerontology and the Biological Nature of Disease 3 credits

This course focuses on the demographics and epidemiology of aging, chronic diseases of aging, disability and function, mortality and end-of-life issues, public health issues of aging and cognitive dysfunction.

## GERO 502 – Gerontology Service Delivery

#### 3 credits

The continuum of aging services, from home and community- based care, home health services, adult day care, assisted living/personal care, long-term care/continuing care retirement communities, the development of hospital units designed to meet the needs of older adults and innovative programs and technologies used for the enhancement of older adults will be examined in this course.

Most evening classes meet from 6 PM to 9 PM & include a Saturday that meets from 8:30 AM - 5:30 PM or 9 AM to 6 PM.

Descriptions for ODL Courses can be found under Organizational Development and Leadership section of the catalog.

T Turbo course Saturday/Sunday, or four Saturdays). Turbo classes are held from 8:30 AM to 5:30 PM or 9 AM to 6 PM.

 $^{\ast}\textsc{Elective}$  course offerings in italics can be substituted for core course offerings as indicated.

## PROGRAM OF STUDY

### <u>Department of Biomedical Sciences (MS)</u> <u>– Philadelphia and Georgia Campuses</u>

#### Biomedical Sciences – 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. All students enter the program as candidates for the two year master of science degree. The first year of 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, followed by a concentration in the second year. Degree completion concentrations are offered in biomedical research (thesis), organizational leadership in the biosciences, public health, and forensic biology. A non-thesis master of science in advanced topics in biomedicine, a two year thesis research option and the organizational leadership in the biosciences concentration are also available at PCOM's Georgia Campus.

All first year courses are required. Students must declare the concentration by the end of their first year. Concentrations offered at:

#### PHILADELPHIA AND GEORGIA CAMPUS

#### Biomedical Sciences – Research/Thesis concentration

Students will have the opportunity to work one-on-one with a faculty mentor on a cutting-edge research project that will advances scientific understanding.

#### Biomedical Sciences – Organizational Leadership in the Biosciences concentration

Students will develop vital skills in the areas of: conflict resolution, facilitation, effective communications, consensus-building, project leadership, meeting design and collaboration.

#### PHILADELPHIA CAMPUS

#### Biomedical Sciences – Forensic Biology concentration

Students will have the opportunity to train in the field of forensic medicine.

#### Biomedical Sciences - Neuroscience concentration

Students will gain additional knowledge into the field of neuroscience.

#### Biomedical Sciences - Population Health concentration

Students will be exposed to the fields public health and psychology

\*Students wishing to pursue concentrations in Forensic Biology, Population Health and Neuroscience must transfer to the Philadelphia Campus for the second year.

#### GEORGIA CAMPUS

#### Biomedical Sciences- General Studies Capstone concentration

Students will be exposed to diverse, relevant, cutting-edge topical areas in biomedical sciences including genetics, stem cell research, pharmacology and nutritional biochemistry.

## Biomedical Sciences – Master of Science (MS) – Philadelphia Campus

## First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
BIOM 501	. Molecular Basis of Medicine	7
BIOM 502	.The Infectious Process	
	Total Credits	10

#### TERM 2 (WINTER)

Course No	Course Title	Credits
BIOM 503	Human Anatomy	
	Histology	
	Total Credits	

#### TERM 3 (SPRING)

Course No	Course Title	Credits
BIOM 505	Neurosciences	3
BIOM 506	. Medical Pharmacology	3
BIOM 507	.Physiology	3
	Total Credits first year	

# <u>Biomedical Sciences – Master of Science (MS) – Philadelphia Campus</u> –Research Concentration

## Second Year

#### TERM 1 (SUMMER)\*

Course No	Course Title	Credits
BIOM 681	Research Proposal	
	Biomedical Sciences Research I	
	Total Credits	

TERM 2 (FA	ALL)	
Course No	Course Title	Credits
BIOM 690	Research Methods	
BIOM 691	Biomedical Sciences	lesearch I
	Total Credits	

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

Course No	Course Title	Credits
BIOM 682	Journal Club	
	Biomedical Sciences Research II	
	Total Credits first year	

#### TERM 4 (SPRING)

Course No	Course Title	Credits
BIOM 693	Biomedical Sciences Research III	
	Total Credits first year	

#### TERM 5 (SUMMER)

Course No	Course Title	Credits
BIOM 685		
BIOM 687	Thesis Status	
Total Credits first year		

\*Several alternative schedules are possible, such as starting in the Fall of the second year, or in the Spring of the first year of the program. See the course descriptions or consult the Registrar or Program Director for course prerequisites and additional details.

## Biomedical Sciences – Master of Science (MS) – Philadelphia Campus

-Forensic Biology Concentration

Forensic biology track students receive practical instruction through coursework and an integrated Capstone course. The forensic biology track is a combination of online instruction and intensive weekend sessions. The weekend sessions are held at the Philadelphia Campus.

## Second Year

TERM 1 (FALL)		
Course No	Course Title	Credits
FMED 500	. Pathology for Forensic Medicine	
	Total Credits	

#### TERM 2 (WINTER)

Course No	Course Title	Credits
FMED 501	. Principles of Forensic Medicine I	6
	Total Credits	6

#### TERM 3 (SPRING)

Course No	Course Title	Credits
FMED 502	. Principles of Forensic Medicine II	
	Total Credits first year	

#### TERM 4 (SUMMER)

Course No	Course Title	Credits
FMED 508	. Capstone Integrated Experience	8
	Total Credits	8

Forensic Biology Concentration courses start in the Fall.

# <u>Biomedical Sciences – Master of Science (MS) – Philadelphia Campus</u> –Organizational Leadership Concentration

Five courses are required

Course No	Course Title	Credits
ODL 501	.Foundations and Systems of Organizational Developmen	t3
ODL 508	Leadership for Practitioners	3
ODL 510	.Capstone: Action Research Project	3
ODL 516	.Developing Systems Literacy: Organization Workshop (T	)3
ODL 517	.Communication Skills for Leaders	3
	Total Credits	15

Electives (choose two from list below)

Course No	Course Title	Credits
ODL 504	.Personal and Professional Development	3
ODL 505	Team Dynamics (T)	3
ODL 506	Social Factors and Cultural Diversity	3
ODL 514	Managing Emotional Systems in the Workplace	3
ODL 520	. Appreciative Inquiry (T)	3
ODL 523	Adventure Leadership: Building Teams the natural Way	3
	Total Elective Credits	6

## Biomedical Sciences – Master of Science (MS) – Philadelphia Campus

Neuroscience Concentration - will require 24 credits beyond the foundation year for the degree. Consult with the program director to develop the selection of the 24 credits

### **Biomedical Sciences – Master of Science (MS) – Philadelphia Campus**

Population Health Concentration – will require 24 credits beyond the foundation year for the completion of the degree. Three courses (total of 9 credits) are taken at Jefferson University and the remaining 5 courses (total of 15 credits) are taken at Philadelphia College of Osteopathic Medicine. Consult with the Vice President for Graduate Programs and Planning to develop the selection of the remaining 15 credits.

## COURSE DESCRIPTIONS

### Master of Science – Biomedical Sciences (MS) – 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.

#### BIOM 502 – The Infectious Process

#### 3 credits

This course introduces graduate students to fundamental principles of immunology and microbiology. This overview includes discussions of the interplay between the microbial pathogen and the host immune response during the infectious process. Representative microorganisms belonging to each class of pathogen (bacterial, viral, fungal and parasite) are discussed. After the introductory lectures, the focus will be on current topics of interest in infectious disease and public health, including vaccines, cancers with an infectious etiology, and eradication of disease.

#### BIOM 503 – Human Anatomy

#### 6 credits

This course provides a comprehensive consideration of the human anatomy as it relates to function in order to provide the anatomical component of diagnosis and treatment. Course objectives include the demonstration of anatomical structural knowledge of all systems in the human body, including musculoskeletal, neuronal, lymphatic, respiratory, cardiovascular, digestive, urinary and reproductive. Emphasis is placed on structural relationships and functional correlations. Learning is facilitated through lecture and group study of anatomical dissections.

#### 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

This course 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 of cardiac, skeletal, and smooth muscle physiology, gastrointestinal, respiratory, cardiovascular, and renal physiology.

#### BIOM 681 - Research Proposal

#### 1 credit

This course introduces the student to literature review, hypothesis generation, and research design. The student will form a partnership with a research mentor and thesis committee. Working with the mentor, the student develops a written research plan which must be approved by the committee and program director. If the project requires clearance by any regulatory board (IRB, IACUC, etc.), this course is considered "in progress," and no grade is issued until such authorization is secured.

#### BIOM 682 – Journal Club

#### 1 credit

The student gives a multimedia presentation that includes appropriate background, methodology, results, interpretations and conclusions of an original study drawn from the recent peer-reviewed literature. Emphasis is placed on developing skills in critical review and in communicating scientific studies in seminar format.

#### BIOM 683 – Manuscript Development

#### 1 credit

The student demonstrates mastery of his or her area of research by writing a viable draft of the thesis manuscript comprising abstract, introduction, background, materials and methods, results, discussion and literature cited. The draft is submitted to and approved by the thesis committee, who schedules the thesis defense in conjunction with the program director.

Prerequisites/Corequisites: BIOM 681, BIOM 682, BIOM 693.

#### BIOM 685 – Thesis Defense 2 credits

The candidate demonstrates mastery of his or her area of research, and biomedical research in general, by delivering a public, seminar-format presentation before the faculty and College community. The audience may question the candidate on matters pertaining to the project and related studies. After the public session, the defense continues with the thesis committee discussing both with the candidate and in private matters that may need to be resolved before the final thesis can be submitted.

Prerequisites/Corequisites: BIOM 683, BIOM 693.

#### BIOM 687 – Thesis Status

#### 1 credit

The candidate revises the written thesis as required by the thesis committee and library guidelines, secures committee approval, and submits the thesis in its final form to the program director, who will then recommend the candidate for degree conferral. This course is considered "in progress" and no grade issued until the final thesis is submitted.

At the end of each term that the thesis is not submitted, the candidate must develop an action plan in consultation with the thesis committee and program director; additional fees may be incurred.

Prerequisite/Corequisite: BIOM 685.

#### BIOM 690 – Research Methods 1 credit

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. This course is cross-listed with PHYA 542.

#### BIOM 691 – Biomedical Sciences Research I

#### 2–5 credits

The student undertakes mentored research leading to the degree of Master of Science in Biomedical Sciences. Students learn lab techniques and review the relevant literature with the goal of understanding not only the "how" but the "why" of their project. If the project has met all regulatory requirements, data collection may commence. This course may be taken in one or more terms for up to seven total credits, and includes at minimum one meeting of the full thesis committee per term.

#### BIOM 692 – Biomedical Sciences Research II

#### 5 credits

The student continues mentored research leading to the degree of Master of Science in Biomedical Sciences. This course may be taken in one or more terms for up to nine total credits, and includes at minimum one meeting of the full thesis committee per term.

Prerequisites: BIOM 501, 502, 503, 504, 505, 506, 507, 681, 690, 691.

#### BIOM 693 – Biomedical Sciences Research III 5 credits

Mentored research that brings the project to a conclusion as approved by the thesis committee, such that it may be presented in written and oral form. This course may be taken in one or more terms for up to nine credits per term, and includes at minimum one meeting of the full thesis committee per term.

Prerequisite: BIOM 692.

### Biomedical Sciences – Master of Science (MS) – Georgia Campus

## First Year

TERM 1 (FALL)		
Course No	Course Title	Credits
BIOM 549G	. Scientific Communication	2
BIOM 550G	. Research Survey Seminar	1
	. Basic Concepts in Biomedical Modeling	
BIOM 558G	. Biochemistry, Cellular and Molecular Biology	5
	Total Credits	10

#### TERM 2 (WINTER)

Course No	Course Title	Credits
BIOM 557G	. Microscopic Anatomy and Embryology	4
BIOM 559G	Biostatistics	1
BIOM 562G	. Homeostasis and Organ Systems I	5
	Total Credits	10

#### TERM 3 (SPRING)

Course No	Course Title	Credits
	. Neuroscience	
	Total Credits first year	9

Biomedical Sciences - Master of Science 2 Year Research Thesis Option - Georgia Campus

With prior approval of the program, a very limited number of students can be enrolled in the 2 Year Research Thesis Option. This option allows for qualified first year students to pursue a thesis concentration project during their first year in the program. Each student participating in this option are registered in a combination of first year courses (and with approval second year courses) and research credits equal to the first and second year term credit hour totals for Research Concentration students. The total number of credit hours for program completion is 53 credit hours, and completion of all the academic requirements for the Research Concentration is required. Students may apply for this option by request during the regular application cycle or upon registering for first term courses. Application in writing is made to the Program Director. Acceptance to this option is made on the basis of review of the student's academic credentials, availability and selection of mentors, and program availability. For further information contact the Georgia Campus Program director.

# <u>Biomedical Sciences – Master of Science (MS) – Georgia Campus</u> –General Studies Capstone Concentration

## Second Year

#### TERM 1 (FALL)

\*Students who do not register for BIOM 612G The Historical Development of Current Themes in Biomedical Sciences Research are required to take BIOM 606G Analytical Reading - Molecular Mechanisms in Spring term.

\*\*Once a student chooses either BIOM 607G or BIOM 650G he/she must continue with that sequence in the subsequent two terms.

Course No	Course Title	Credits
BIOM 618G .	Epidemiology	

Choose one of the following groups: Group 1

Course No	Course Title	Cı	redits
BIOM 610G	Medical Immunology		3
BIOM 611G	Medical Microbiology		3
BIOM 619G	Medical Microbiology	Methods Practicum	1
Or			
Group 2			
BIOM 612G	The Historical Develop		
	Themes in Biomedical	Sciences Research*	2
BIOM 613G	Molecular Genetics		4
And one of the fol	lowing courses:**		
BIOM 607G	Independent Study/Sc	ientific Composition	1
or			
BIOM 650G	Special Topics in Biom	edical Sciences	
	Research and Methods	;	1
Total credits for th	e term will depend on wh	ch Group option is chosen.	
Group 1	Total credits for the ter	m	9
		m	

# <u>Biomedical Sciences – Master of Science (MS) – Georgia Campus</u> –General Studies Capstone Concentration

## Second Year

TERM 2 (WINTER)		
Course No	Course Title	Credits
Two of the following	four electives:	
BIOM 603G	. Concepts in Pharmacology and Toxicology	4
	. Nutritional Biochemistry	
BIOM 614G	. Developmental Neuroscience	4
BIOM 615G	. Vascular Control Mechanisms	4
BIOM 690G	. Research Methods Practicum in Biomedical Sciences	4
And one of the follow	ving courses:	
BIOM 607G	. Independent Study/Scientific Composition	1
or		
BIOM 650G	. Special Topics in Biomedical Sciences	
	Research and Methods	1
	Total Credits	9

#### TERM 3 (SPRING)

Course No	Course Title	Credits
BIOM 606G	. Analytical Reading – Molecular Mechanisms	2
or		
Group 2		2
	. Stem Cell Biology	3
And one of the follow	0	
	. Independent Study/Scientific Composition	4
or		
BIOM 650G	. Special Topics in Biomedical Sciences Research	
	and Methods	4
Total credits for the t	erm will depend on which Group option is chosen.	
Group 1	.Total credits for the term	6
	.Total credits for the term	
	Total credits required for completion of Year 2	24
	-	
Total credits for MS of	degree completion	53

# **Biomedical Sciences – Master of Science (MS) – Georgia Campus** Thesis Concentration

## Second Year

IERM I (SUMMER	)*	
Course No	Course Title	Credits
BIOM 690G	.Research Methods Practicum in Biomedical Sciences	
BIOM 691G	.Biomedical Research	2
	Total Credits	6

#### TERM 2 (FALL)

Course No	Course Title	Credits
BIOM 618G	. Epidemiology	1
	. Medical Microbiology Methods Practicum	
BIOM 691G-693G .	. Biomedical Research/Elective**	4
	Total Credits	6

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

Course No	Course Title	Credits
BIOM 691G-693G .	. Biomedical Research/Elective**	
	Total Credits first year	

#### TERM 4 (SPRING)

Course No	Course Title	Credits
BIOM 691G-693G.	. Biomedical Research/Elective Courses**	6
	Total Credits first year	6
	l for completion of Year 2	

All students enrolled in the Research Thesis Concentration work under the supervision of a mentor who, in collaboration with the Program Director and thesis committee, ensure and validate completion of all concentration and degree requirements.

Prior to their start in the concentration, all students are required to select a programapproved mentor and develop with their approved mentor a schedule for completion of the concentration that includes the following components: selection of appropriate thesis topic, thesis committee selection, development and defense (to the thesis committee) of a thesis research proposal with any necessary institutional and program approvals, participation in a journal club or a regularly attended laboratory meeting experience, creation of a schedule for the thesis manuscript development and completion.

Students will be required to start in Summer following their foundation year with BIOM 690G\* and BIOM 691G.

\*Students may be given a waiver of BIOM 690G and delay the start of research until Fall term. This waiver requires an approval from the Program Director and will be based on prior progress toward required research approvals, committee selection and development of the thesis proposal. However, the student will still be required to prove competencies to both mentor and Program Director that would normally have been certified by passing BIOM 690G.

If approved, the student will still be required to complete 24 credits toward their MS degree.

As stated above, students are required to complete practicum BIOM 619G and epidemiology BIOM 618G or another approved statistics course. A minimum of three credit hours of thesis research will be required each term with the exception of credits taken at the end for the purpose of thesis completion, thesis submission and thesis defense.

\*\* Elective courses must be approved by mentor and course director. Elective courses can be substituted for Research credits provided students complete enough research credits to complete their project based on time frames approved by joint agreement of mentor, thesis committee and program director. Electives can also be added as extra courses (in addition to the 53 credits required for graduation) However the student will be enrolled in these courses as out of degree and will be personally responsible for tuition payments for this course work. The only exception would be for courses that the student needs to retake or replace in order to meet the GPA requirement for the degree.

#### **Biomedical Sciences – Master of Science (MS)** Organizational Leadership Concentration – Georgia Campus Concentration

Five Required Courses:

Course No	Course Title	Credits
ODL 501G	. Foundations and Systems of	
	Organizational Development	3
ODL 505G	. Team Dynamics (T)	3
or		
ODL 517G	. Communication Skills for Leaders	3
ODL 510G	. Capstone (completed in the last term)	3
ODL 526G	. Managing Self and Emotional Systems in	
	the Workplace	3
	Total Credits	12

ELECTIVE COURSES – Choose two courses from list below:

Course No	Course Title	Credits
ODL 506G	. Social Factors and Cultural Diversity	3
ODL 508G	. Leadership for Practitioners (T)	3
ODL 520G	. Appreciative Inquiry (T)	3
ODL 522G	. Leader as Meeting Designer and Facilitator	3
ODL 530G	. Special Topics in ODL	3
	Total credits to complete electives	9

(T) Turbo class held in an accelerated weekend format.

\*\* Note: Information regarding Forensic Biology Concentration can be found under Biomedical Science-Philadelphia Campus

## COURSE DESCRIPTIONS

### Master of Science – Biomedical Sciences (MS) – Georgia Campus

#### BIOM 549G – Scientific Communication

#### 2 credits

This course is designed to teach basic scientific communications skills that are crucial to the success of graduate students in the biomedical sciences. Various communication topics and strategies will be addressed in class. Students will be trained to read, interpret and use various formats to communicate scientific information from primary scientific literature. Practice opportunities and critiques will be provided.

#### BIOM 550G – Research Survey Seminar 1 credit

The goal of this course is for the student to gain a view into cutting-edge research by surveying current research from the perspectives of basic scientific thinking, hypothesis development and testing, and interpretation of data. Students are trained in research approaches to relevant problems and consider which experiments might best address the question. Topics include: how a hypothesis is developed from existing data, how experiments are chosen to address specific hypotheses, and how the data are interpreted.

#### 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. Lectures and laboratory investigation using plastinated specimens and models are employed to provide the students with a comprehensive background in structural organization and vocabulary. Timed examinations and medical applications are used to emphasize the importance of this material in future coursework.

## BIOM 553G – Basic Concepts in Biomedical Modeling

## 2 credits

This course is designed to assist the student with developing a functional understanding of basic biochemical, cellular and systems physiologic processes through application of basic physical and chemical principles. The course builds on principles with which students are familiar from prerequisite coursework. Students examine and analyze how these principles have been modified to model cellular and human physiologic systems. Practical examples are used to both explain and test student competency. Students are expected to apply literature and database search techniques to identify specific research examples and to develop an appropriate project proposal. Additionally, public presentation, written assignments and testing are used to assess student academic performance.

#### BIOM 554G – Neuroscience

#### 4 credits

This course introduces the student to the field of medical neurosciences including cognition, the senses and the neuromuscular junctions. Emphasis is placed on structural organization and design of the nervous system, supported by the lecture and laboratory approach employed in the Human Gross Anatomy course that precedes this neuroscience experience. Understanding of basic physiologic principles and nervous system design is tested using timed exams that require students to apply their basic knowledge to an

analysis of a variety of medically based scenarios.

#### BIOM 556G – Human Physiology 5 credits

The Human Physiology course revisits ideas, concepts and didactic information presented in the first two terms of the Biomedical Sciences Graduate Program, using the materials learned to guide the student to a basic understanding of the physiology of the human body. Previously presented ideas and models are used as the framework for presenting the details of the cardiovascular, pulmonary and renal systems physiology and for explaining how these systems are regulated through autonomic and endocrine control. Relevant medical examples are used to illustrate basic mechanisms and regulatory processes. As an end goal each student is expected to be able to apply the concepts of modeling (learned in the first term) to organize, analyze and retain presented material. Emphasis is placed on the student's ability to identify important system parameters, prioritize facts and regulatory mechanisms, and create effective analogies that demonstrate understanding of how these systems work together to create a homeostatic environment in the normal human.

#### BIOM 557G – Microscopic Anatomy and Embryology

#### 4 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 how tissues are organized into organs to support the various systems of the body. The embryology component focuses on gametogenesis 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 559G – Biostatistics 1 credit

This course introduces the student to basic principles of statistical methods as applied to biomedical research, design and critical reading of the scientific literature. The student is expected to develop ability to use these basic principles to perform simple research data analysis and to interpret data reported in the current scientific research literature. This course in sequence with the new second year course Epidemiology replaces the 3 credit course BIOM 609G – Biostatistics and Epidemiology (formerly BIOM 552G).

#### BIOM 562G Homeostasis and Organ System I 5 credits

This is a five credit course that studies the integration of the Anatomy and Physiology of human organ systems. The factual and conceptual aspects of morphology and physiology are learned as a unified narrative. The study of human anatomy and physiology is guided by clinical specialties and the essential knowledge base required for understanding functional organ systems and their interactions. Major challenges to homeostasis will be identified for each specialty. The textbooks are Moore's Essentials of Clinical Anatomy and Guyton and Hall's Textbook of Medical Physiology. Laboratory exercises are incorporated as demonstrations and interactive observations in the anatomy lab and the physiology lab. The organ systems or specialties covered include: Dermatology, Neurology (introductory / basic peripheral nervous system), Myology / Osteology, Cardiology,

Pulmonology & Otolaryngology. Study of each specialty will incorporate at least two case studies that illustrate the most common diseases or challenges to homeostasis for that system. Also, a case study that may be uncommon but has great educational value for understanding the pathophysiology of that system will be presented.

## BIOM 563G Homeostasis and Organ Systems II (HOS II ) 5 credits

This is a five credit course that continues the study of the integration of the Anatomy and Physiology of human organ systems. The factual and conceptual aspects of morphology and physiology are learned as a unified narrative. The study of human anatomy and physiology is guided by clinical specialties and the essential knowledge base required for understanding functional organ systems and their interactions. Major challenges to homeostasis will be identified for each specialty.

The textbooks are Moore's Essentials of Clinical Anatomy and Guyton and Hall's Textbook of Medical Physiology. Laboratory exercises are incorporated as demonstrations and interactive observations in the anatomy lab and the physiology lab. The organ systems or specialties covered include: Urology / Renal, Gastroenterology, Endocrinology, Immunology, Gynecology and Male Reproductive System. Study of each specialty will incorporate at least two case studies that illustrate the most common diseases or challenges to homeostasis for that system. Also, a case study that may be uncommon but has great educational value for understanding the pathophysiology of that system will be presented.

## BIOM 603G – Concepts in Pharmacology and Toxicology

#### 4 credits

This course introduces the student to major concepts used in the study of

pharmacology and toxicology. It focuses on drugs used in autonomic and cardiovascular pharmacology and toxicology. The course utilizes a lecture format and several laboratory sessions, one of which involves the use of the patient simulator in the clinical learning laboratory.

#### BIOM 604G – Nutritional Biochemistry

#### 4 credits

This course introduces the student to the foundation of nutrition as it impacts biochemical pathways within the body. This course applies a competency-based approach in which an emphasis is placed on student presentation and active participation in the classroom. Final course evaluation is based on the effectiveness of the student's classroom participation, prior preparation based on classroom outcomes and a final project that requires the student to design an experimental investigation of a topic of his or her own interest and then to apply his/her knowledge base by developing and generating an appropriate NIH-style grant proposal.

#### BIOM 605G – Special Topics

#### 1-5 credits

This course number is maintained for use when a one-time need is perceived.

#### BIOM 606G – Analytical Reading – Molecular Mechanisms 2 credits

The focus of this course is on the elaboration of molecular mechanisms in the current literature. 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

#### 1–4 credits a term

This course is a graded three term sequence that is a guided independent study in which the student explores the biomedical science basis for health/medical conditions and syndromes that present in the clinic. Under the supervision of a graduate faculty member, the student is required to read and compile current scientific literature on the clinical condition chosen and write a major review article. Students will be required to present their topic in a formal presentation to the program faculty and their class peers. In addition to the presentation, the student must complete a written manuscript that adheres to scientific publication standards. Enrollment in this course requires approval of the program director and identification of a faculty mentor. Course may be substituted for BIOM 650G.

#### BIOM 610G – Medical Immunology

#### 2 credits

The course is designed to provide the student with an understanding of the cellular and molecular basis of the immune response, and the role of the immune system in health and disease. Additional topics will cover immune- mediated pathological processes, tumor immunology and autoimmunity.

#### BIOM 611G – Medical Microbiology

#### 3 credits

This course is designed to provide the student with the basic principles of medical microbiology and infectious disease. Emphasis will be placed on the identification, recognition and pathogenesis of the major medically relevant microorganisms including bacteria, viruses, fungi and parasites. Additional topics will include physiological and epidemiological factors contributing to human infectious disease and an introduction to antimicrobial agents.

Note: Medical Immunology and Medical Microbiology as a sequence replace the former second year first term course Immunity and Infection BIOM 602G.

# BIOM 612G - The Historical Development of Current Themes in Biomedical Sciences Research

#### 2 credits

The focus of this course is the historical development of current and important research trends through the tracking of an idea or concept from its origins in the original scientific literature to the current applications in cutting edge research. The purpose is for the student to gain an appreciation of how the development of ideas and concepts is essential to the investigation and better understanding across different areas of science. 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 interpretation of scientific literature as well as public speaking skills.

## BIOM 613G – Molecular Genetics 3 credits

The goal of this course is for the student to develop a deeper understanding of the molecular biology techniques introduced in earlier courses. The material will focus on understanding the molecular genetic tools that are having a tremendous impact on medicine. Specific topics will include various types of cloning, gene transfer, methods to study gene expression at the mRNA and protein levels, microRNAs and other recent developments.

Prerequisite: BIOM 558G

### BIOM 614G – Developmental Neuroscience

#### 4 credits

This course has the goal of providing students with a solid foundation in developmental neuroscience. The student is required to integrate findings from anatomical, cellular, molecular and genetic approaches. Topics covered will include neural induction, regionalization of the neural plate and neural tube, neurogenesis, gliogenesis, cellular determination and differentiation, migration, growth cones and axon pathfinding, dendrite formation, programmed cell death, synapse formation and elimination, critical periods and developmental plasticity. Students are required to have a basic knowledge of cell biology and neuroscience before attempting this course.

#### BIOM 615G – Vascular Control Mechanisms

#### 4 credits

This course guides the student through an advanced study of vascular control mechanisms. The course is designed so that the student examines new advances and current understanding of various aspects of vascular control and is heavily based in current literature. Independent literature research and class participation, in addition to 3 exams, are a significant component of the final grade.

# BIOM 616G – Experimental Design and Data Analysis in Biomedical Research 2 credits

This course is intended to provide basic training to students about how to start a biological research study with a reasonable experimental design and to apply best practices in data analysis at the end. This course will use examples from molecular biology, electrophysiology and imaging studies to explain how to adopt most currently accepted methods in experimental design and data analysis. Students enrolled in this course are required to have a prerequisite understanding of basic statistics.

#### BIOM 617G – Stem Cell Biology

#### 3 credits

This course is a discussion- and debate-based review of current topics in stem cell biology and the uses of stem cells in medicine and biotechnology. Topics include review and discussion of cell biology, developmental biology, molecular biology and genetics; stem cell characteristics and preparation; clinical applications and therapeutic uses of stem cells and tissue engineering; and regulatory and ethical issues. Current peer-reviewed literature provides up-to- date information for classroom discussion.

#### BIOM 618G – Epidemiology

#### 1 credits

This course introduces the student to basic principles of epidemiology as applied to biomedical research, design and critical reading of the scientific literature. The student is expected to develop ability to use these basic principles to perform simple epidemiologic analysis and to interpret studies reported in the current scientific research literature. The students are required to identify measures of disease frequency and excess risk and apply these in the context of epidemiologic questions and problems. Students are also asked to interpret and apply the calculation and application of screening test utilities. Students are expected to master concepts including, but not limited to, morbidity and mortality measures, incidence, prevalence, attack rate, relative risk, odds ratio, positive and negative predictive value, sensitivity and specificity.

This course, in sequence with the new first year course Biostatistics (BIOM 559G), replaces the 3 credit course BIOM 609G – Biostatistics and Epidemiology (formerly BIOM 552G)

#### BIOM 619G – Medical Microbiology Methods Practicum 1 credit

This course covers basic concepts of microbiology with emphasis on sterile techniques, staining, antibiotic susceptibility testing, isolation and identification of pathogenic microorganisms. As a final learning outcome, students are required to apply his/her acquired knowledge and skills to successfully identify a mixture of two unknowns. This course is the competency-based section of BIOM 611G Microbiology and BIOM 610G Medical Immunology course sequence, and students are registered in conjunction with BIOM 611G. Registration for this course as a separate component or registration for BIOM 611G without this competency-based component requires the approval of the program director.

## BIOM 620G Human Viruses, Vaccines and Infectious Diseases 3 credits

This course is designed to build upon basic molecular genetics principles in order to familiarize the students with the related principles of virology, including structure, biology, replication, pathogenesis and host-cell interactions. The mechanisms of viral adaptation will be utilized as real-time applications of mutation to see how these can be exploited to predict the severity of viral outbreaks and the development of drug resistance. Students will gain an appreciation for the population genetics of infectious diseases, while the control and prevention of infection is a theme that will be discussed throughout the course. Finally, the development of the host innate immune system and viral counterstrategies will be examined.

This course is designed to complement the fundamental concepts introduced in Molecular Genetics (BIOM 613G) and Epidemiology (BIOM 618G). Students should successfully both BIOM 613 G and BIOM 618 G before enrolling in this course. Student who have not completed Molecular Genetics and Epidemiology can only register for BIOM XXX G with the prior approval on the course director and program director.

# BIOM 650G – Special Topics in Biomedical Sciences Research and Methods 1 – 4 credits a term

This course is a graded three term sequence that is a guided independent study in which the student explores an area of interest in either Biomedical Sciences Research or Methods. The course requires a topic selection to be approved by a mentor/instructor. Students are expected to complete a thesis-style paper of twenty-five pages or more which can be a review, project proposal, grant application, etc. (any proposals require paperwork for appropriate regulatory committees); minimum of 75 citations/references, graded presentation, scheduled weekly meetings with faculty mentor; and competency-based testing and assignment completion. Students may enroll in this course only through the approval of the Program Director. Course may be substituted for BIOM 607G.

#### BIOM 690G – Research Methods Practicum in Biomedical Sciences 4 credits

This course is intended to provide students with a basic understanding and practical experience in research and experimental principles and methods. Students are given the opportunity to conduct experiments related to cell and molecular biology and keep a written record of all research experiments performed. Experiments complement the existing curriculum taught in cell and molecular biology and as such, should help the student gain additional understanding of the material and the techniques used to address questions in basic science research. Complementary to their laboratory-based assignments, students are provided with the requisite background information they will need in order to understand the purpose of each experiment.

#### BIOM 691G, 692G, 693G – Biomedical Research/Elective

#### 5 – 21 credits

Supervised individual research projects undertaken by students in the program leading to the degree of Master of Science in Biomedical Sciences.

#### BIOM 694G Independent Study

#### 1 – 6 credits

This option allows for a student to be enrolled in a topic specific independent study which can be a unique elective topical study or a Biomedical Science course specific course offering in an independent study format. Biomedical Sciences Graduate course letter grading scales are applied and the instructor and student agree to a written set of grading criteria before course begins. Offering of this course is based on instructor and program resource availability and requires the approval of the program director.

## BIOM 699G – Thesis Continuation

This course is designed to allow students who have not completed their thesis during the normally allotted time to register and complete their thesis. This course is available with the approval of the Program Director.

## PROGRAM OF STUDY

### Department of Forensic Medicine and Pathology – Master of Science (MS) Forensic Medicine – Philadelphia Campus

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 on the weekends 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 or certificate is awarded upon completion of the Pathway program.)

# COURSE SEQUENCE

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

# First Year

All first year courses are on-campus courses.

TERM 1 (FALL)		
Course No	Course Title	Credits
FMED 500	. Pathology for Forensic Medicine	
	Total Credits	

TERM 2 (WINTER)		
Course No	Course Title	Credits
FMED 501	. Principles of Forensic Medicine I	6
	Total Credits	

# TERM 3 (SPRING)

Course No	Course Title	Credits
FMED 502	. Principles of Forensic Medicine II	6
	Total Credits first year	6

# **COURSE SEQUENCE**

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

# Second Year

All second year courses are online courses.

#### 

### TERM 2 (FALL)

Course No	Course Title	Credits
FMED 506	. Evidence-Based Forensic Medicine	4
	Total Credits	4

### TERM 3 (WINTER)

Course No	Course Title	Credits
FMED 505	. Bioethics in Professional Practice	4
	Total Credits first year	4

#### TERM 4 (SPRING)

Course No	Course Title	Credits
FMED 513	Law and Evidentiary Procedure	
	Total Credits first year	

#### TERM 5 (SUMMER)

Course No	Course Title	Credits
FMED 508	. Capstone Integrated Experience	
	Total Credits first year	8
Total credits required	for degree completion	40

# COURSE DESCRIPTIONS

# FMED 499 – Basic Human Biology in Forensic Medicine (Pathway Program Only) (online)

### 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 nonbiomedical 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 (classroom)

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 (classroom)

This course begins with an overview of the field of forensic medicine. This includes discussion of the history of forensic science and medicine and the roles of medical examiners, coroners and non-physician medico-legal death investigators. General principles of crime scene investigation are introduced. Instruction then moves to the science behind forensic medicine. Topics in this section include postmortem changes, sudden natural death, blunt force injury, sharp-force injury, ballistics and gunshot 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 (classroom)

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 medico-legal 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 is discussed as well as techniques for providing grief assistance.

Prerequisite: FMED 500

# FMED 504 – Research Design and Methodology

### 4 credits (online)

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 is also discussed.

#### FMED 505 – Bioethics in Professional Practice 4 credits (online)

This course introduces students to the field of biomedical ethics and related medico-legal 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 (online)

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, students learn how to use the evidence-supported answer in a manner that matches the values and views of the students' patients.

### FMED 508 – Capstone Integrated Experience (Online and Field 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 affords students the opportunity to apply the knowledge and the skills acquired through 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 (online)

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.

# 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 that 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.

## **Bio-Medical Sciences**

**Professor and Chair** Brian Balin, PhD

### Professors Emeriti

Walter Ceglowski, PhD	(Microbiology & Immunology)
Henry W. Hitner, PhD	(Neuroscience, Physiology & Pharmacology)
Justice James, DO	(Microbiology & Immunology)
Tage N. Kvist, PhD	(Anatomy)
Robert J. Niewenhuis, PhD	(Anatomy)
Richard M. Kriebel, PhD	(Neuroscience, Physiology & Pharmacology)
Ruth Thornton, PhD	(Biochemistry & Molecular Biology)

### Professors

Christopher S. Adams, PhD	(Anatomy)
Denah M. Appelt, PhD	(Neuroscience, Physiology & Pharmacology)
Brian J. Balin, PhD	(Microbiology & Immunology)
Robert J. Barsotti, PhD	(Neuroscience, Physiology & Pharmacology)
Marcus G. Bell, PhD	(Neuroscience, Physiology & Pharmacology)
Ruth Carter Borghaei, PhD	(Biochemistry & Molecular Biology)
Farzaneh Daghigh, PhD	(Biochemistry & Molecular Biology)
Marina D'Angelo, PhD	(Anatomy)
Kerin L. Fresa, PhD	(Microbiology & Immunology)
Frederick J. Goldstein, PhD	(Neuroscience, Physiology & Pharmacology)
Charlotte H. Greene, PhD	(Neuroscience, Physiology & Pharmacology)
Susan Hingley, PhD	(Microbiology & Immunology)
Michael P. McGuinness, PhD	(Anatomy)
Mindy George-Weinstein, PhD	
Lindon H. Young, PhD	(Microbiology & Immunology)
-	

### **Clinical Professors**

Peter B. Berget, PhD Bohdan Minczak, PhD, MD John R. Porter, PhD (Neuroscience, Physiology & Pharmacology) (Neuroscience, Physiology & Pharmacology) (Neuroscience, Physiology & Pharmacology)

### Visiting Clinical Professor

Robert M. Fogel, DO

(Microbiology & Immunology)

### Associate Professors

Kerin M. Claeson, PhD (Anatomy) Christopher S. Little, PhD (Microbiology & Immunology) Michael Shank. DO (Anatomy) Dawn M. Shell, PhD (Microbiology & Immunology) Dianzheng Zhang, PhD

### Assistant Professors

Rani Bright, MD Qian Chen, PhD Cathy J. Hatcher, PhD Heather I. Montie. PhD Mei Xu. MD. PhD

(Microbiology & Immunology) (Microbiology & Immunology) (Neuroscience, Physiology & Pharmacology) Jocelyn J. Lippman-Bell, PhD (Neuroscience, Physiology & Pharmacology) (Biochemistry & Molecular Biology) (Anatomy)

### **Clinical Assistant Professors**

Kenneth A. Myers, PhD (Microbiology & Immunology) Bela Peethambaran. PhD (Microbiology & Immunology)

#### Instructors

David M.	Cavanaugh, BS	(Anatomy)
Sebastian 1	Egberts, MS	(Anatomy)

#### **Research Instructor**

Mary C. DeJoseph, DO (Neuroscience, Physiology & Pharmacology)

### <u>Emergency Medicine</u>

Professor and Chair John W. Becher, DO

### Professor

John W. Becher, DO

### Clinical Professors

Thomas A. Brabson, DO Gregory M. Johnston, MD, MS John J. Kelly, DO Rosa M. Marino, DO Steven J. Parrillo, DO Stephen A. Pulley, DO Alexander M. Rosenau, DO

#### **Clinical Associate Professors**

Gavin C. Barr, MD James J. Flowers, DO Christine F. Giesa, DO Marna R. Greenberg, DO Dennis M. Guest, DO Michael J. Hoh, DO Kenneth D. Katz, MD Richard M. Lucas, MD

Richard MacKenzie, MD Douglas L. McGee, DO James E. Miranda, MD Eileen M. Singer, DO Kevin R. Weaver, DO Charles c. Worrilow, MD Gerald C. Wydro, MD

#### Assistant Professor

Barry Burton, DO

### **Clinical Assistant Professors**

Brian A. Acunto, DO Thomas J. Amadio, DO Charles F. Barbera, MD, MBA Joshua Baron, DO Robert Bassett, DO Lawrence C. Brilliant, MD David B. Burmeister, DO Robert J. Campbell, MD Robert D. Cannon, DO Gerald A. Coleman III, DO Matthew D. Cook, DO Steven Costalas. DO Arthur J. Dortort, DO John Drstvensek, MD Daniel T. Ellis. MD Elizaeth M. Evans, DO Ross Feld, DO, MA, MS Michael Galuska, MD Terrence Goyke, DO Brett S. Greenfield, DO Chad A. Gunsolly, DO Susan Hinchcliffe, DO George C. Hobbib, MD Russell E. James II, MD Steven A. Johnson, DO Annahieta Kalantari, DO Bryan G. Kane, MD Kathleen E. Kane, MD John D. Keogh, MD Thomas C. Licata, DO Todd J. Luyber, DO David G. MacBride, DO Robert McAndrew. DO James G. McHugh, MD Daniel F. Merz, DO Jeffrey M. Moldovan, DO Clifford J. Neal, DO Loretta Opila, MD Andrew J. Panko, DO Matthew D. Perry, DO

Deborah L. Pierce, DO Ericka Powell, MD Shaila Ouazi, DO Shawn M. Quinn, DO David Richardson, MD Kevin R. Roth, DO Kristen M. Sandel, MD John W. Schroeder, DO Henry E. Seibert, MD Adam P. Sigal, MD Mark J. Stone, DO Rick Sumrock, MD Leonard P. Ulan. DO Scott M. Urban, DO John F. Wheary, DO Brian J. Wieczorek, MD Brian Wolfson, MD Eric T. Wolk, DO Neil W. Yoder, DO Gary D. Zimmer, MD

### **Clinical Instructors**

Janice K. Balas, MD Jennifer J. Brown, BS, PA-C Minh Bui. MD Stuart Friedman, DO Kimberly I. Groen, DO Jojo D. Hammond, MD Stella N. Kalantzis, DO Michelle Parsons Langrehr, MSN-FNP Marc B. Lewbart, DO Lisa Maercks, MD Laura McElrone Mory, MD Andrew C. Miller, DO Molly E. Mulflur, MD Tina Nester, DO Brian A. Newton, DO Michael Nguyen, MD Elizabeth M. Paterek, MD Christopher Ricci, MD Jaime Roques, MD Ankit M. Shah, MD Christopher Spewock, MD Ryan B. Taylor, DO Jonathan D. Trager, DO Suresh Wable, MD Nathan Welle, PA-C Matthew J. Young, DO

# Family Medicine

**Professor and Chair** Harry J. Morris, DO, MPH

### Professor Emeritus

Oliver Bullock, DO Harold Schreiber, DO

### Professors

Michael Becker, DO Harry J. Morris, DO, MPH Kenneth J. Veit, DO, MBA

### **Clinical Professors**

Robert I. Danoff, DO Robert Dolansky Jr., DO Larry Doroshow, DO Carol L. Henwood, DO Randy G. Litman, DO Vincent Lobo, DO A. Scott McNeal, DO Richard B. Russell Jr., DO Lawrence L. Silberberg, DO Michael T. Steelman, DO

### Associate Professors

Larry M. Finkelstein, DO David Kuo, DO

### Clinical Associate Professors

Christine A. Black-Langenau, DO John N. Boll Jr., DO Michael J. Bradley, DO Mary K. Brigandi, DO Wade A. Brosius, DO David M. Callahan, DO Gordon R. Eck, DO Anne J. Egan, DO Stephen Evans, DO Richard Frey, DO Joseph Greco, MD Timothy M. Heilmann, MD Kieren P. Knapp, DO Michael Kouyoumdjian, DO Michael Krafchick, DO Jeffrey A. Lindenbaum, DO Deborah Longo-Malloy, DO Natale E. McGann, DO Martha McGarey Metzgar, DO Frank P. Matrone, DO Bradley J. Miller, DO Andrea D. Pedano, DO

Elaine Pendrak, DO Leonard Popowich, DO Mark K. Radbill, DO Jeanne M. Sandella, DO Michael W. Semelka, DO David D. Skillinge, DO E. Kathleen Sweeney, DO Marlene B. Terlingo, DO David G. Thimons, DO Harris A. Twersky, DO Jeffrey Verzella, MD Margo L. Waitz, DO Richard M. Watson, DO Jacqueline Weaver-Agostoni, DO Margaret M. Wilkins, DO Kenneth Wiseman, DO Michael J. Zawisza, DO

### Assistant Professors

Peter F. Bidey, DO Charmaine Chan, DO Ernest Gelb, DO Joan M. Grzybowski, DO Allan M. McLeod, DO, JD, MBA Marta Motel, DO Barbara T. Williams-Page, DO

#### **Clinical Assistant Professors**

David Ambrose, MD Onyeama Anakwe, DO, PhD Elizabeth Anderson, MD Jorge Arboleda, DO Gary A. Baiocchi, DO Ronald Baird, DO Donald M. Beckstead, MD Chris Belletieri. DO Joseph Blasiol, DO John Bosi, DO Murray Brand, DO David Bresticker, MD Timothy Brooks, DO Victoria A. Brown, MD John M. Buonomo, DO Jonathan J. Burke, DO James A. Caffrey, DO Paul M. Caracappa, DO James Clarke, DO John E. Connelly, DO Sean Conroy, DO Debra W. Curry, MD Christopher A. Davis, DO Jason L. DelCollo, DO

Eileen DiGregorio, DO Tamara B. Fedec, DO D. Daniel Files, DO Michael D. Fischer, DO Ruth E. Frye, DO Wendy Fuhr, MD Winson T. George, PhD, DO Eric Ginn, MD Jay J. Glickman, DO Jeffrey A. Gold, DO Julius Goslin III, DO Lynda C. Graves, MD Stephen M. Hagberg, MD Bethann Hamm, DO Paul Hamm, DO William J. Herbert III, DO Jesse Hickland, MD Rachel Hogg, MD George R. Homa, DO Kimberly A. Jones, DO Accamma Joy, DO Daniel Kambic, DO Eric D. Kane, DO Saby Karuppiah, MD William Keenan Jr., MD Janice M. Kenneson, DO Alexander I. Kiotis, DO Andrew Kirschner, DO Daria Kovarikova. MD William G. Kracht, DO Joel Kravitz, DO Patricia Kroth, DO Stephen J. Kushner, DO Aaron B. Lane, MD Alice M. Laskaris, MD Maureen M. Litchman, MD Anthony Lobianco, DO Patricia H. Lotito, MD Aimee Luo, DO Christopher Malsch, DO James W. Manley, DO Jessica Mayer, DO Ralph D. Mazzochetti, DO Brian McDonough, MD Frank McLaughlin, DO Fiona J. McLellan, MD Glenn G. Miller Sr., DO Lincoln B. Moser, DO Dennis M. Moss, DO Roland W. Newman II, DO Anthony E. Niescier, DO Henry C. Novroski, DO

Christopher D. Olson, DO David M. Petro, DO, MPH Joseph E. Pinciotti Jr., DO Deborah Popowich, DO Jamie Rapacciuolo, DO, MBS Angelo J. Ratini, DO Melinda M. Ratini, DO, MS Rosalee Rehrig, DO Patrick D. Rice, MD Lisa E. Robertson, DO Guillermo L. Rodriguez, MD Steven F. Rubin, DO Gabriel Ruggiero, DO Terry S. Ruhl, MD Andrew Ruppersberg, DO Armando Sallavanti, DO Janice Schifferli, DO Timothy Schmeltzle, DO Lawrence W. Schmitzer, DO Mitchell Schwartzmann, DO Phyllis B. Scott, MD Matthew Shore, DO Laura J. Siems, MD Curtis Swagler, DO Donald J. Sweeney, DO Amy E. Swindell, DO Pamelal Q. Taffera, DO, MBA Todd A. Taylor, DO Michelle Thompson, DO Phillip E. Tobash, DO Leo W. Todd, DO James Tweedy, DO Anthony F. Uberti, MD Ronald Unice, DO Monika T. VanSant, DO Mary E. Vitucci, DO Chelsea Worstall, MD Richard Wozniak, MD J. Bryard Yoder, MD Christine Zabel, DO Jane A. Zendarski, DO

#### Instructors

Kristen A. Berry, DO Jennifer Prescott-Coraggio, DO

### **Clinical Instructors**

Benish Aqil, MD Michelle R. Braucher, CRNP, MSN Joann Brower, BS, PA-C Anthony Brunozzi, DO Kelly Campanile, PsyD

Anthony E. DiMarco, DO Paul Eberts, MD Kenneth Fox, DO Brad Friedmann, DO Gregory J. Gallik, DO David Hack, MD Matthew A. Halfar, MD Izat A. Hjazi, MD Lynn Johnston, MD Joseph Kalik, DO Stephanie B. Kaliner, DO Royal R. Koeller, MD Paul Kosmorsky, DO Jeffrey Langbein, DO Aaron Listopad, DO Brenton V. Long, DO Leonard Malamud, DO Aalok V. Malanka, DO Adam Mikulski, DO Ashley J. Miller, DO Farah N. Mirza, DO Robert Monteleone, MD Kenneth Morris, DO Arthur W. Morrow, DO Elizabeth Muhiire-Ntaki. MD Matthew A. Nussbaum, DO Larry Peck, DO Frank Perrone, DO Luan Pham, MD Yana Saknovsky, DO Kary Schroyer, DO Elizabeth M. Smith, MPA, PA-C Deborah Snyder, DO Jeanne Spencer, MD Randall Stigliano, DO Richard Stigliano, DO Steven Thomas, DO Lauren Trimeloni. MD Lori Truman-Kraft, DO Jean Wilson, DO

# Forensic Medicine and Pathology

**Professor and Chair** Gregory McDonald, DO

### **Clinical Assistant Professors**

Joel Garblik, DDS, MS James McCans, MS Samuel A. Spiegel, PhD

### Clinical Instructors

James F. Armstrong, RN Ron Artingstall Victor M. Berg Sr., EMT George Bevilacqua Patricia S. Biswanger, JD John E. Collins, BS John D. DeMarco, BA John M. Finor Lawrence J. Gentile, BS Kathryn M. McCans, MD Francis A. McCormick David I. McDonald John J. Newell, MS Dawn Perlmutter, PhD Carl M. Rone, AA John R. Wallace, PhD Jessica K. Webb, JD Adrienne B Williams

# <u>Geriatric Medicine</u>

**Professor and Chair** Katherine E. Galluzzi, DO

### Professor

Katherine E. Galluzzi, DO Michael Shank, DO

### Associate Professor

Michael Srulevich, DO, MPH

### **Clinical Associate Professor**

Michele L. Boornazian, DO M. Susan Burke, MD Joseph Hope, DO Stanley J. Savinese, DO

Clinical Assistant Professor

Francis A. Salerno, MD

### Instructor

Christopher Pitsch, DO

### **Clinical Instructors**

Gregory Busch, DO Umar Farooq , MD Deborah Fox, DO Olufemi A. Paul, RPh John E. Peacock, DO

# Internal Medicine

Professor and Chair Daniel J. Parenti, DO Divisional Chairs Open Neil H. Feldman, DO Jeffrey S. Freeman, DO Steven Lichtenstein, DO Bruce Kornberg, DO Pat A. Lannutti, DO Michael Levin, DO David H. Loughran, DO Joseph S. Lubeck, DO Stephen M. Purcell, DO Michael A. Venditto, DO Open

### Professors Emeriti

James F. Conroy, DO James E. McHugh, DO Marvin L. Rosner, DO

### **Clinical Associate Professors**

David J. Addley, DO David Altimore, DO Samir Akach, MD Wayne V. Arnold, DO Anthony V. Benedetto, DO Robert H. Biggs, DO Geoffrey L. Braden, MD John G. Brady, DO John B. Bulger, DO Renee P. Bullock-Palmer, MD David M. Callahan, DO Michael P. Carson, MD Issam Cheikh, MD Zenia A. Chernyk, DO Mark S. Codella, MD Peter Correnti Jr., DO Veronica A. Covalesky, MD Anthony A. Donato, MD Julie A. Dostal, MD Daniel C. DuPont. DO Charles R. Egoville, MD Ronald P. Emmi, DO Andrew T. Fanelli, DO Robert Ferguson, MD Andrew C. Friedman, DO Steven M. Geller, DO David L. George, MD Howard M. Goldman, DO

(Hematology and Oncology) (Adult Allergy & Immunology) (Endocrinology and Metabolism) (Gastroenterology) (Cardiology) (Preventive and General Medicine) (Nephrology) (Infectious Diseases) (Neurology) (Dermatology) (Pulmonary & Critical Care Medicine) (Rheumatology)

Thomas D. Griffin, MD William S. Hirsch, DO Neil R. Holland, MBBS Albert E. Janke III, DO Kenneth A. Knowles, DO David E. Knox, MD Nelson P. Kopyt, DO Daniel Lazowick, DO Michael L. Levin, DO Jeffrey N. Levine, DO Michael A. Magro Jr., DO Michael P. Mann, DO Carlin I. McLaughlin, DO John P. McNamara, DO Andrew A. Martin, MD Gerald A. Meis, DO Joel P. Miller, DO John H. Nipple, DO Andrew Ogden, DO Martin O'Riordan, MD Larry Paolini, DO Domenic Pisano, DO Eva F. Placentra-Sesso, DO Alexander S. Poulathas, DO Tarun K. Ray, MD Michael A. Resnick, DO Lewis J. Rose, MD Morris I. Rossman, DO Cara E. Ruggeri, DO Edward F. Ryan, DO Stephen E. Sacks, DO Tipu F. Saleem, MD William P. Saliski Jr., DO Jorge J. Scheirer, MD Alan B. Schorr, DO Marcia I. Segal, DO Stanton L. Segal, MD Rajnikant S. Shah, MD, MBA Erik I. Soiferman, DO William Sommers, DO William J. Strimel, DO William D. Surkis, MD David S. Tabby, DO Dominic Valentino III, DO Robert Watterson, MD Andrew B. Woldow, MD Dominick Zampino, DO

#### **Clinical Assistant Professors**

Gary A. Aaronson, DO Gary A. Abrams, MD Lillian Alt, MD

David J. Batluck, DO Michael G. Benninghoff, DO Caroline B. Bera, DO Aaron Best. DO Aileen A. Boa, MD Keith A. Boell, DO Cheryl A. Branon, DO Jon E. Brndjar, DO David R. Brooker, MD Keith I. Buhl. MD Dina F. Capalongo, DO Guillermo E. Carnero, MD Lee A. Celio. MD Bruce N. Chamovitz, MD Kelly J. Chaney, DO Scott B. Chelemer, MD Lee C. Chua, MD Patricia A. Cocantore-Ford, MD Coyle S. Connolly, DO Joseph Conroy, DO Rocco J. Crescenzo, DO Catherine A. Cunningham, DO Harry A. DeButts III, DO Joseph delCastillo, MD Brian F. D'Eramo, DO Stephanie A. Detterline, MD Haitham R. Dib, MD Lauren M. DiMarino, DO Alyson E. Dobracki, DO Christopher A. Domarew, MD, PharmD Jonathan Doroshow, MD Fabio L. Dorville, MD Rebecca Harper Dougherty, MD Christopher Droogan, DO Anna Dubyanskite, MD Michael A. Dunn, DO Mohamed Abou El Fadl, MD Tanya Ermolovic, DO Mohamad M. Fallouh, MD Bruce A. Feldman. DO Neil H. Feldman, DO Nancy A. Finnigan, DO Frank H. Fish. MD Elizabeth A. Fitzgerald, DO John R. Fontanilla DO Scott Forman, DO Elliott B. Frank, DO Thomas F. Freenock Jr., MD Oren L. Friedman, MD James r. Gengaro, DO Alan G. Ghaly, DO Brett Gilbert, DO

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Alexander S. Nicholas, DO

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# **Bio-Medical Sciences**

#### Professors

Noncision(Pathology, Microbiology and Immunology)Bonnie A. Buxton, PhD(Pathology, Microbiology and Immunology)Charles A. Daniels, MD, PhD(Neuroscience, Physiology & Pharmacology)Harold L. Komiskey Jr., PhD(Neuroscience, Physiology & Pharmacology)Brian M. Matayoshi, PhD(Neuroscience, Physiology & Pharmacology)Mary P. Owen, PhD, JD(Neuroscience, Physiology & Pharmacology)Vlad Stanescu, MD, MSc(Anatomy)Richard E. White, PhD(Neuroscience, Physiology & Pharmacology)

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Shafik Habal, MD	(Pathology, Microbiology and Immunology)
Lori A. Hardy, PhD	(Anatomy)
Francis E. Jenney Jr., PhD	(Biochemistry)
Huo Lu, PhD	(Anatomy)
Karim Z. Zaman, DO	(Pathology, Microbiology and Immunology)

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Kimberly Baker, PhD	(Biochemistry)
Valerie E. Cadet, PhD	
Abigail C. Hielscher, PhD	(Anatomy)
Robert K. McAfee, PhD	(Anatomy)
Michael Selby, PhD	(Anatomy)
Shu Zhu, PhD	(Neuroscience, Physiology & Pharmacology)

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# Emergency Medicine

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Marc J. Farraye, MD Gene R. Ferri, MD Thomas P. Giberson, DO Anil K. Goklaney, MD Marla Golden, DO Deborah R. Griffiths, MD Jose E. Gumarin, MD Michael D. Hagues, DO Darryl Harris, MD Iames D. Hogue, DO Pratik Mehta. MD Michael Mudrey, DO Steven G. O'Mara. DO Oguguo C. Okoye, MD James E. Owen, MD William H. Pullen, MD Julio E. Rios, MD Mark Rosing, DO Donald A. Ruf. MD Laura E. Schaefer. MD Richard O. Shields, MD John A. Shivdat. DO Dwayne Washington, MD Bruce S. Whitman, DO

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# <u>Family Medicine</u>

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### Geriatric Medicine

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## Internal Medicine

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# Library Sciences

Instructor Skye Bickett, MLS

# <u>Medical Humanities</u>

**Professor** Ali Moradi, MD, MPH

# **Obstetrics and Gynecology**

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#### Clinical Associate Professor Gretta A. Gross, DO

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#### and Head/Neck Surgery Clinical Associate Professor Robert B. Contrucci, DO

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# ALUMNI ASSOCIATION

The Alumni Association of PCOM was formed on September 8, 1902, two 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 13,000 living DO alumni and over 2,500 graduate program alumni who practice throughout the United States, in five foreign countries and in every branch of the military service. In addition, the Association promotes PCOM to prospective students and provides financial support for excellence in osteopathic and health care education.

Contributions to the Alumni Association support the increasingly critical programs and services underwritten by the Association. In addition, the Association makes special gifts to support College priorities, including a gift of \$100,000 in 2012, a gift of \$100,000 in 2013 to support the renovation of the Clinical Learning and Assessment Centers on both the Philadelphia and Georgia Campuses, and a \$50,000 scholarship gift to honor PCOM President and Chief Executive Officer Matthew Schure, PhD, upon his retirement.

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 a Board of Directors, composed of elected representatives from regional districts around the United States and representing all academic programs of the College. 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 and Development Philadelphia College of Osteopathic Medicine 4180 City Avenue Philadelphia, PA 19131 215-871-6120 or 800-739-3939

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