



**UNIVERSITY OF  
GEORGIA**  
College of Pharmacy

**COLLEGE OF PHARMACY BULLETIN**

**2018-2019**

Pursuant to directives of the President of this institution, the University of Georgia continues its affirmative implementation of equal opportunity to employees, students, covered contractors and vendors, and applicants for employment, admission, or contractor/vendor status. The University of Georgia will act in matters of employment, admissions, programs, and services free of prohibited bias with regard to race, creed, color, sex, national origin, religion, age, veteran status, or disability. Further, the University of Georgia will not maintain racially segregated facilities.

Continuation of the above policies is consistent with applicable provisions of the Civil Rights Act of 1964, the Education Amendments of 1972, Executive Order 11246, Revised Order 4, the Vietnam Era Veterans Readjustment Act of 1974, the Rehabilitation Act of 1973, and The Americans with Disabilities Act of 1990, as revised and/or amended, with implementing regulations. Accordingly, this institution will not discriminate in employment, admissions, programs, or services with regard to any position for which the applicant, employee, or student is qualified and will make reasonable accommodation for physical and mental limitations.

The Affirmative Action Plan implementing the above body of law, regulation, and policy is administered by the UGA Equal Opportunity Office at 119 Holmes-Hunter Academic Building, Athens, Georgia 30602. Telephone inquiries concerning this Plan may be directed to 706-542-7912. Copies of this Plan are available for inspection in the Equal Opportunity Office and in the UGA Main Library during normal weekday working hours. Affirmative Action Plan narrative may also be reviewed at the website, <https://eoo.uga.edu>, by selecting “Affirmative Action Plan.”

This is an unofficial publication of the University of Georgia. The official publication for academic matters of the University of Georgia is the University of Georgia Bulletin ([www.bulletin.uga.edu](http://www.bulletin.uga.edu)).

While every effort is made to provide accurate and current information, the University reserves the right to change, without notice, statements in the bulletin concerning rules, policies, fees, curricula, courses, calendar, or other matters. Further, the statements set forth in this bulletin are for informational purposes only and should not be construed as the basis of a contract between a student and the institution.

If you have a disability and need assistance in order to obtain this bulletin in an alternative format, please contact the College of Pharmacy Office of Student Affairs at (706) 542-5278.

## TABLE OF CONTENTS

Academic Calendar .....	4
General Information.....	5
College of Pharmacy History.....	6
College of Pharmacy Faculty.....	8
Doctor of Pharmacy Program .....	11
Program of Study .....	11
Admission to the Professional Program.....	11
Application Guidelines .....	12
Application Timeline .....	12
Tuition, Fees, and Other Expenses .....	13
Financial Aid.....	13
Pharmacy Scholarships .....	14
Pre-Pharmacy Curriculum .....	17
Doctor of Pharmacy (Pharm.D.) Curriculum.....	18
Course Descriptions .....	22
Pharmaceutical and Biomedical Sciences.....	22
Clinical and Administrative Pharmacy .....	24
Interdepartmental Courses .....	29
Practice Experience.....	30
Pharmacy Internship .....	31
Student Organizations.....	32
Contact Information .....	35

## ACADEMIC CALENDAR 2018-2019

### FALL 2018

Orientation and RX DAWGS Boot Camp .....	Wednesday-Friday, August 8-10
White Coat Ceremony ( <i>First-year Students</i> ) .....	Saturday, August 11
Classes Begin .....	Monday, August 13
Holiday.....	Monday, September 3
Midpoint of Semester.....	Wednesday, October 3
Fall Break.....	Friday, October 26
Thanksgiving Holidays .....	Monday-Friday, November 19-23
Classes End .....	Tuesday, December 4
Reading Day .....	Wednesday, December 5
Final Exams .....	Thursday-Wednesday, December 6-12

### SPRING 2019 (*TENTATIVE*)

Classes Begin .....	Wednesday, January 9
Holiday.....	Monday, January 21
Midpoint of Semester.....	Friday, March 1
Spring Break .....	Monday-Friday, March 11-15
<i>First-Year</i> Classes End .....	Tuesday, April 9
Final Exams, <i>First-Year</i> Classes.....	Thursday-Wednesday, April 11-17
Classes End .....	Tuesday, April 30
Reading Day .....	Wednesday, May 1
College of Pharmacy Commencement.....	Saturday, May 4
Finals Exams .....	Thursday-Wednesday, May 2-8
UGA Commencement.....	Friday, May 10

## **GENERAL INFORMATION**

### **ATHENS, GEORGIA**

With a metropolitan population of more than 100,000, Athens is a vibrant city situated in rolling Piedmont country. Athens is known for its many cultural opportunities, including concerts, films, and plays. Atlanta, about 65 miles southwest of Athens, offers musical and theatrical events plus major league sports. Only a few hours away from Athens are major recreational areas such as beaches, the Great Smoky Mountains, and national forests containing numerous lakes and hiking trails. The climate is moderate with a daily mean temperature range from 33 to 51 degrees in January and from 69 to 90 degrees in July.

### **THE UNIVERSITY OF GEORGIA**

The University of Georgia is a unit of The University System of Georgia. The System's Board of Regents was created in 1931 as a part of a reorganization of Georgia's state government. With this act, public higher education in Georgia was unified for the first time under a single governing and management authority. The governor appoints members to the Board, who each serve seven years. Today the Board of Regents is composed of 19 members, five of whom are appointed from the state-at-large, and one from each of the 14 congressional districts. The Board elects a chancellor who serves as its chief executive officer and the chief administrative officer of the University System. The Board oversees the 26 colleges and universities that comprise the University System of Georgia and has oversight of the Georgia Archives and the Georgia Public Library System. For further information, contact: Board of Regents of the University System of Georgia, 270 Washington Street, S.W., Atlanta, Georgia 30334.

### **ACCREDITATION**

The professional program at the University of Georgia College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education. The Council can be contacted at 135 S. LaSalle Street, Suite 4100, Chicago, Illinois 60603-4810 or by calling (312) 664-3575.

The University of Georgia is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award baccalaureate, masters, specialist and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for questions about the accreditation of the University of Georgia.

### **UNIVERSITY OF GEORGIA ADMINISTRATION**

Jere W. Morehead, President, <http://www.uga.edu/presofc>, (706) 542-1214  
Pamela S. Whitten, Provost, <http://www.provost.uga.edu>, (706) 542-5806  
Svein Øie, Dean, College of Pharmacy, <http://www.rx.uga.edu>, (706) 542-1914

## COLLEGE OF PHARMACY HISTORY

In 1903, the Committee on Laws and Disciplines of the Board of Trustees authorized the organization of a School of Pharmacy at the University of Georgia in Athens. At the same time, a local physician, **Dr. Samuel C. Benedict** was appointed to the chair of Materia Medica in the School. Space was allocated in Science Hall, but in November 1903 it burned to the ground. Terrell Hall was constructed on the site and was occupied in June 1905. Since graduation from a college or high school was not a requirement at that time to practice pharmacy, many students enrolled, took classes for a year, and then apprenticed in a pharmacy. The first graduating class was 1908, when three students received their Pharmacy Graduate (Ph.G.) degree.

In January 1907, **Mr. Robert C. Wilson** was elected Instructor in Pharmacy and, on the death of Dr. Benedict in 1914, was named Director of the Department of Pharmacy; in 1924 he became Dean of the School of Pharmacy. Although the first woman to enter the School did so in 1920, the first women graduated in 1925. Dean Wilson's continuous struggle to improve pharmacy in Georgia led to the development of one of the first four-year required pharmacy degrees in the nation, beginning in 1926. In 1939, the school moved to quarters in New College and was accredited by the Accreditation Council on Pharmaceutical Education, a rating that has been maintained continuously since that time.

**Dr. Kenneth L. Waters** was named Dean of the School of Pharmacy in 1948. Under his guidance, the school grew to the point where a new facility was deemed essential. The building was completed in 1964. One year later, the first students of the five-year pharmacy program graduated. The new facility presented an opportunity for student body and faculty growth, with faculty experiencing the greatest percentage increase. Academic programs were improved and research output was significantly increased. The service program developed rapidly to the point where several faculty members were involved. Externship and clinical programs were required of undergraduate students in an effort to present the optimum learning experience. The School's graduate degree program began with the Master's program in 1951. In 1964, the Ph.D. degree program was authorized, and the first degrees were granted in 1967.

**Dr. Howard C. Ansel** was named Dean in 1977. During his tenure, the name of the school was changed to the College of Pharmacy to reflect the unit's expanded educational, research, and service roles. On Dr. Wilson's 100th birthday in 1978, the building was named the Robert C. Wilson Pharmacy Building. A Doctor of Pharmacy (Pharm.D.) degree program was offered as a post-baccalaureate degree program and as a tracking option. The Clinical Pharmacy Program at

the Medical College of Georgia was established and an assistant dean of pharmacy was named as its administrator. The graduate and research programs of the College were also strengthened through major building renovations, establishing the College of Pharmacy as one of the premier research units on campus. The reading room was named in honor of the late Professor Ford C. Millikan in 1983. An office of Postgraduate Continuing Education was created to provide for the continuing education needs of the practitioner.

**Dr. Stuart Feldman** of the University of Houston was named Dean in 1991. During his tenure the College received Georgia State lottery funds to increase technology in education and the Millikan Educational Resources Center was converted to a computer laboratory for student access. The curriculum was changed from the quarter to the semester system, and the entry-level Doctor of Pharmacy degree and the Non-traditional Doctor of Pharmacy Pathway Program were initiated. A full-time experiential coordinator was hired.

**Dr. Svein Øie** of the University of California San Francisco became Dean on January 1, 2000. Under his guidance, the College has increased its class size, expanded its regional presence, been involved in establishing a Center for Drug Discovery, increased interdisciplinary research and strengthened its research focus. With full implementation of the entry-level PharmD program, the clinical faculty has been augmented, clinical activities increased, and the College has become actively involved in residency training. Two clinical campuses, each with its own assistant dean, were established in Albany (Southwest Georgia) and Savannah (Southeast Georgia). In 2003, the College celebrated its centennial. Fundraising efforts have increased the number of scholarships, endowed professorships and augmented available funds for building enhancements. A 93,000 sq. ft. building addition, the Pharmacy South Building, opened in fall 2009.

*Dean Øie announced that he will be stepping down from his position and returning to the faculty. Kelly M. Smith, Pharm.D., FASHP, FCCP, an academic leader with a record of advancing research and pharmacy education, has been named dean of the University of Georgia College of Pharmacy. Dr. Smith is currently associate dean for academic and student affairs at the University of Kentucky College of Pharmacy, and her appointment at UGA is effective August 1, 2018.*

## COLLEGE OF PHARMACY FACULTY

### ADMINISTRATION

Øie, Svein, Ph.D., Dean  
Bartlett, Michael, Ph.D., Associate Dean for Science Education, Research & Technology  
Francisco, George, Pharm.D., Associate Dean  
Do, Duc, Ph.D., Assistant Dean for Student Affairs  
Duke, Lori, Pharm.D., Assistant Dean for Experience Programs  
Fagan, Susan, Pharm.D., Assistant Dean for Augusta University Program  
Fulford, Michael, Ph.D., Director of Assessment  
von Waldner, Trina, Pharm.D., Director of Continuing Professional Development & Outreach

### PHARMACEUTICAL AND BIOMEDICAL SCIENCES

#### **Cummings, Brian, Ph.D., Professor & Interim Department Head**

Bartlett, Michael, Ph.D., Professor & Associate Dean for Science Education, Research & Technology  
Beach, J. Warren, Ph.D., Associate Professor  
Cai, Houjian, Ph.D., Assistant Professor  
Chu, Chung, Ph.D., Professor Emeritus  
Elder, Deborah, Pharm.D., Clinical Associate Professor  
Franklin, James, Ph.D., Associate Professor  
Greenspan, Phillip, Ph.D., Associate Professor  
Grimsey, Neil, Ph.D., Assistant Professor  
Hooks, Shelley, Ph.D., Associate Professor  
Kennedy, Eileen, Ph.D., Associate Professor  
Liu, Dexi, Ph.D., Panoz Professor of Pharmacy  
Momany, Cory, Ph.D., Associate Professor  
Mumper, Russell, Ph.D., Professor  
Murph, Mandi, Ph.D., Associate Professor  
Øie, Svein, Ph.D., Professor & Dean  
Pegan, Scott, Ph.D., Associate Professor  
Rekhi, Singh, Ph.D., Academic Professional Associate & Director of BS Pharmaceutical Sciences Program  
Roberts, Arthur, Ph.D., Associate Professor  
Strauch, Eva-Maria, Ph.D., Assistant Professor  
Weng, Han-rong, Ph.D., Assistant Professor  
White, Catherine, Ph.D., Associate Professor  
Xiong, May, Ph.D., Associate Professor  
Yao, Yao, Ph.D., Assistant Professor  
Zastre, Jason, Ph.D., Associate Professor  
Zheng, Yujun George, Ph.D., Professor



## CLINICAL AND ADMINISTRATIVE PHARMACY

### **Phillips, Bradley, Pharm.D., Milliken-Reeve Professor & Department Head**

Abu-Sawwa, Renad, Pharm.D., Clinical Assistant Professor  
Bland, Christopher, Pharm.D., Clinical Associate Professor  
Branan, Trisha, Pharm.D., Clinical Associate Professor  
Chastain, Daniel, Pharm.D., Clinical Assistant Professor  
Clemmons, Amber, Pharm.D., Clinical Associate Professor  
Cobran, Ewan, Ph.D., Assistant Professor  
DeRemer, David, Pharm.D., Clinical Associate Professor  
Duke, Kenneth, M.B.A., Clinical Assistant Professor  
Fagan, Susan, Pharm.D., Distinguished Research Professor & Assistant Dean  
Fleming, Virginia, Pharm.D., Clinical Associate Professor  
Francisco, George, Jr., Pharm.D., Professor & Associate Dean  
Francic, Duska, Pharm.D., Ph.D., Associate Professor  
Hawkins, Anthony, Pharm.D., Clinical Assistant Professor  
Herist, Keith, Pharm.D., Clinical Associate Professor  
Jayawardhana, Jayani, Ph.D., Associate Professor  
May, Dianne Williams, Pharm.D., Clinical Professor  
May, J. Russell, Pharm.D., Clinical Professor & Associate Department Head  
Miller, Mindi, Pharm.D., Clinical Associate Professor  
Misher, Anne, Pharm.D., Clinical Assistant Professor  
Narayanan, Priya, Ph.D., Associate Professor  
Newsome, Andrea, Pharm.D., Clinical Assistant Professor  
Norton, Merrill, Pharm.D., Clinical Associate Professor  
Osae, Sharmon, Pharm.D., Clinical Assistant Professor  
Perri, Matthew III, Ph.D., Professor & Associate Department Head  
Phan, Stephanie, Pharm.D., Clinical Associate Professor & Associate Department Head  
Phillips, Beth, Pharm.D., Clinical Professor  
Rebitch, Catherine, Pharm.D., Clinical Associate Professor  
Richards, Hal, Pharm.D., Clinical Assistant Professor  
Sattler, Lilian, Ph.D., Assistant Professor  
Seagraves, Brian, Pharm.D., Academic Professional Associate  
Segar, Lakshman, Ph.D., Associate Professor  
Shenoy, Somanath, Ph.D., Professor  
Smith, Susan, Pharm.D., Clinical Assistant Professor  
Southwood, Robin, Pharm.D., Clinical Associate Professor  
Stone, Rebecca, Pharm.D., Clinical Assistant Professor  
Tackett, Randall, Ph.D., Professor  
Thiman, Michael, Pharm.D., Clinical Assistant Professor  
Young, Henry, Ph.D., Associate Professor

## INTERNATIONAL BIOMEDICAL REGULATORY SCIENCES

### **Mullis, David, Ph.D., Director**

Akelewicz, Frances, M.S., Instructor  
Arkin, Ronald, M.S., Instructor  
De Gelas, Seppe, M.S., Academic Professional Associate

Geiger, Robert, Ph.D., Academic Professional Associate  
Hodges, Johnna, M.Ed., Assistant Director  
Jacks, Alexander, Academic Professional Associate  
Silva, Samuel, Ph.D., Academic Professional Associate

#### **EXPERIENCE PROGRAMS**

Brooks, Kay, M.Ed., Associate Director IPPE – Community  
Darley, Andrew, Pharm.D., Associate Director IPPE – Health System  
Hannings, Ashley, Pharm.D., Associate Director IPPE – Ambulatory Care  
Logan, Linda, Pharm.D., Public Service Associate  
May, Dianne, Pharm.D., Clinical Professor & Augusta Campus Director of Pharmacy Practice  
Experiences  
McElhannon, Michelle, Pharm.D., Public Service Associate  
Miller, Mindi, Pharm.D., Clinical Associate Professor & Regional Coordinator/Atlanta  
Sheffield, Melody, Pharm.D., Southwest Georgia Campus Director of Pharmacy Practice  
Experiences  
Watts, Misha, Pharm.D., Southeast Georgia Campus Director of Pharmacy Practice Experiences  
Welch, Lindsey, Pharm.D., APPE Director

#### **STUDENT AFFAIRS**

Hill-Silcott, Vivia, Ph.D., Director of Diversity Programs and Academic Support  
Vitale, Danielle, Ph.D., Director of Recruitment and Career Development

## **DOCTOR OF PHARMACY PROGRAM**

### **PROGRAM OF STUDY**

The College of Pharmacy offers the Doctor of Pharmacy (Pharm.D.) degree to students who successfully complete the six-year study of prescribed courses. To receive the Pharm.D. degree, a student must have earned academic credit for not less than 69 semester hours in pre-professional coursework and 148 semester hours of required professional coursework. The pre-professional coursework may be completed at any accredited institution of higher education. At the University of Georgia, the pre-professional program is administered through the College of Arts and Sciences. The last four years (ten semesters) are in the professional program and must be in residence at the College of Pharmacy.

Reflecting the vital importance of health care teams in the delivery of quality health care services, the Pharm.D. curriculum emphasizes interprofessional education and the ability to practice in team settings. Group work is employed in many Pharm.D. didactic courses and a student's ability to function as an effective team member is evaluated at multiple points in the curriculum. Through cases and simulations, Pharm.D. students interact with students in a variety of other health care programs including medicine, nursing, and veterinary medicine. Introductory pharmacy practice experiences (IPPEs) and advanced pharmacy practice experiences (APPEs) also provide numerous opportunities for students to function on health care teams in a variety of practice settings (e.g., hospitals, pharmacies, clinics). The College of Pharmacy is committed to assuring that its Pharm.D. graduates are ready to practice as effective members of interdisciplinary health care teams, thus making important contributions to patients' well-being.

### **ADMISSION TO THE PROFESSIONAL PROGRAM**

Applicants to the professional program must take the Pharmacy College Admission Test (PCAT) and have their scores transmitted to the Pharmacy College Application Service (PharmCAS). In addition to PCAT scores, the selection process will utilize the applicant's grade point average in pre-pharmacy coursework, recommendations, and an on-campus interview. The College of Pharmacy accepts students into its professional program for beginning classes only in the fall semester.

Transcripts showing all college coursework and letters of recommendation must be submitted to PharmCAS. Students may apply to the College of Pharmacy after they have completed the majority of the pre-pharmacy requirements. Applicants who are accepted but do not attend the designated term must repeat the admission process for a future term.

Applicants for admission to the College of Pharmacy who are known to have been officially dismissed from another pharmacy program will not be accepted. A student who gains entrance to the College by misrepresentation of facts may be dismissed immediately.

## APPLICATION GUIDELINES

1. For **Early Decision**, applicants must submit completed applications online to PharmCAS and to the College of Pharmacy by **September 4, 2018**. For **Regular Decision**, applications must be submitted by **February 1, 2019**. The earlier the application is submitted, the sooner it will be processed and considered by the Admissions Committee. For detailed admissions information, see the Prospective Students page on the College of Pharmacy website, <http://rx.uga.edu/students/prospective-pharmd-students/>.
2. At least two letters of recommendation must be submitted directly to PharmCAS; letters sent to the College of Pharmacy will not be accepted. One recommender should be a college instructor familiar with the applicant's academic background; the other should be a health care professional, preferably a pharmacist supervisor/mentor, who can speak to the applicant's potential in the pharmacy profession.
3. All applicants must take the Pharmacy College Admission Test (PCAT) and have their scores sent to PharmCAS. Test dates are offered in July, September, October, November 2018, January and February 2019. Visit the PCAT website at <https://www.pcatweb.info/> for details. The summer and fall test dates are preferred so that students have the opportunity to retake the test in January or February if they desire. It is important, however, that applicants not wait until the spring to take the PCAT for the first time. Students may take the PCAT as many times as they wish without penalty. Review books and courses for the PCAT are available. For more information, contact the College of Pharmacy's Office of Student Affairs, 706-542-5278, [admissions@rx.uga.edu](mailto:admissions@rx.uga.edu).
4. All applicants should be prepared for an on-campus interview with faculty members. During the interview, students may be asked to discuss their academic background, reasons for selecting pharmacy as a profession, plans upon graduation, work experience, leadership experience, and extracurricular activities. Verbal and written communication skills also will be evaluated.

## APPLICATION TIMELINE

- July 18, 2018 – PharmCAS (<http://www.pharmcas.org/>) and the University of Georgia College of Pharmacy applications (<http://rx.uga.edu/students/prospective-students/>) open
- September 4, 2018 – Early Decision applications deadline for PharmCAS and UGA College of Pharmacy. **Both applications have the same deadline.**
- September 2018 – Admissions interviews begin
- October 19, 2018 – Early Decision notifications sent to applicants
- February 1, 2019 – Regular Decision applications deadline for PharmCAS and the University of Georgia College of Pharmacy. **Both applications have the same deadline.**
- April 2019 – Admissions interviews end
- April/May/June 2019 – Advising sessions for incoming students
- August 7-9, 2019 (*tentative*) – RxDawgs Boot Camp and New Student Orientation
- August 10, 2019 (*tentative*) – White Coat Ceremony

## TUITION, FEES, AND OTHER EXPENSES

Expenses for Doctor of Pharmacy students are higher than for students in most other programs at the University of Georgia. The following (*not including miscellaneous living expenses*) is an **ESTIMATE of expenses for the 2018-2019 academic year:**

	Year in Program			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
Georgia Resident Tuition and Fees	\$18588	\$21454	\$18588	\$26774
Non-Resident Tuition and Fees	\$39128	\$44532	\$39128	\$56620
Books and Supplies	\$1810	\$300	\$200	\$100
Transportation	\$803	\$803	\$2140	\$6420
Room and Board	\$7936	\$7936	\$7936	\$10608
Miscellaneous	\$439	\$309	\$198	\$516

The above estimate does not reflect the cost of mandatory health insurance since most Pharm.D. students waive those charges while covered on their parents' health insurance. Students who do pay for their own health insurance should contact the University of Georgia Office of Student Financial Aid to request a cost of attendance adjustment.

The University reserves the right to change its tuition and fees at the beginning of any academic term and without previous notice. This right will be exercised cautiously. Visit [http://busfin.uga.edu/bursar/bursar\\_quick\\_links/](http://busfin.uga.edu/bursar/bursar_quick_links/) for additional information.

While the provisions of this bulletin will ordinarily be applied as stated, the College of Pharmacy reserves the right to change any provision listed in this bulletin, including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students advised of any such changes. Information on changes will be available in the Office of the Dean. It is especially important that each student note that it is the student's responsibility to keep apprised of current graduation requirements for the student's particular degree program.

## FINANCIAL AID

### THE UGA STUDENT FINANCIAL AID OFFICE

Requests for student aid are handled through the University of Georgia Office of Student Financial Aid. The office is open year-round (except for holidays), and the hours of operation are 8:00 AM – 5:00 PM, Monday through Friday. For more information about financial aid and eligibility, you may call the Office of Student Financial Aid at (706) 542-6147 or contact the office at [osfa@uga.edu](mailto:osfa@uga.edu).

## **THE HOPE SCHOLARSHIP PROGRAM**

Students who meet the criteria for the HOPE Scholarship and have not exceeded the maximum number of credit hours under the HOPE program may continue their HOPE Scholarship in the pharmacy curriculum. Pharmacy students have an eligibility limit of 127 semester hours (which includes both pre-pharmacy and pharmacy coursework) under the HOPE guidelines. Specific questions regarding eligibility for the HOPE Scholarship should be directed to the University of Georgia Office of Student Financial Aid.

## **PHARMACY SCHOLARSHIPS**

The student scholarships awarded through the College of Pharmacy are listed below. *Scholarships for incoming first-year students are awarded through a special process.* Contact Dr. Duc Do, Assistant Dean for Student Affairs, for more information at 706-542-7287.

Jim and Kim Andrews Endowed Student Scholarship  
Ralph and Sandra Balchin Scholarship  
Belcher Family Endowed Student Scholarship  
Beth Goldman Block Memorial Scholarship  
Pamela R. Bramlett Endowed Scholarship  
Broadrick Family Endowed Student Scholarship  
Tommy and Patsy Bryan Independent Pharmacy Scholarship  
Ron J. Burnette Endowed Student Scholarship  
Bobby and Becky Burnley Endowed Student Scholarship  
Donald E. and Cecelia V. Cadwallader Endowed Scholarship  
Ron Cain Endowed Student Scholarship in Pharmacy  
Cardinal Health Endowed Student Scholarship  
Senator Buddy Carter Distinguished Leadership Endowment  
Hugh and Tina Chancy Leadership Endowment  
Chapman Family Endowed Student Scholarship  
David and Jane Chu Scholarship  
College of Pharmacy Faculty Scholarship  
William Gary Cunningham Endowed Student Scholarship  
Sharon B. Deason Endowed Student Scholarship  
Ferrell "Al" Dixon, Jr. Endowed Student Scholarship  
J. Ashley and Jill R. Dukes Endowed Student Scholarship  
Mike Ellington Memorial Scholarship  
Randy Ellison Northwest Georgia Scholarship  
George and Mary Elrod Scholarship Endowment for Student Assistance  
Ethridge/Kosater Endowed Student Scholarship  
Kwaku M. Fenin Endowed Student Scholarship  
Heidi Flye Kroger Memorial Scholarship  
Jim Furman Student Scholarship  
Georgia Pharmacy Foundation Scholarship – Harold B. Hodgson, Jr., R.Ph.  
Georgia Pharmacy Foundation Scholarship – Regina Baird  
Georgia Pharmacy Foundation Scholarship – Carlton Henderson  
Georgia Pharmacy Foundation Scholarship – Neil L. Pruitt, Sr.

Ed Giles Pharmacy Scholarship (Northwest Georgia Pharmacists Association Fund)  
Global Clinical Supplies Group  
Tim and Ann Hansford Specialty Pharmacy Scholarship  
Gloria Pike Harbuck Student Award  
Harveys Supermarket Pharmacy Endowed Scholarship  
Herbert W. Hatton Endowed Scholarship  
Renee McDonald Hay and David Hay Scholarship  
Charles R. Herrin, Jr. Memorial Scholarship  
J. Michael and Marilyn L. Hiott Student Award  
The Hunter Family Scholarship  
Leslie and Rondell Jagers Endowed Student Scholarship  
Fermin Jay Endowed Student Scholarship  
Dione Mavis Johnston Scholarship of Excellence  
Albert W. Jowdy Scholarship  
Jun Family Achievement Scholarship  
Kaiser Permanente Pharmacy Scholarship  
Kmart Corporation Scholarship  
Kroger Endowed Student Scholarship  
Lake Family Scholarship  
David K. Leitch Endowed Student Scholarship  
Robert E. Long Kroger Memorial Scholarship  
Reagan Roland Lykins Memorial Scholarship  
Andre Mackey Scholarship Fund  
Amy and Glenn Morgan Endowed Student Scholarship  
Murphy Family Scholarship  
William F. "Dobby" Nathaniel Distinguished Student Scholarship  
National Association of Chain Drug Stores Foundation Pharmacy Partners Scholarship  
Jay Kimsey Neal Scholarship  
Oh Family of Johns Creek Scholarship  
Wayne C. Olson Scholarship  
Amy A. Panter Memorial Scholarship  
W. Allen and Helen Low Partridge Endowed Student Scholarship  
Fred M. Peterson, M.D. Student Scholarship  
Brad G. and Beth B. Phillips Student Development Scholarship  
Publix Super Markets Scholarship  
Randolph-Mercer Memorial Scholarship  
Rite Aid Endowed Student Scholarship  
Rob and Courtnee Russ Endowed Student Scholarship  
Charles C. and Jackie Sherwood Endowed Student Scholarship  
Charles C. and Jackie Sherwood Study Abroad Endowment  
J.M. Smith Foundation Scholarship  
Solomons Family Endowed Student Scholarship  
Southeastern Society of Health-System Pharmacists Scholarship  
Rick and Robbin St. John Endowed Scholarship  
Dana E. Strickland Endowed Student Scholarship  
Sukipa Scholarship, a/k/a Jinki Patel Foundation Scholarship  
John H. Taylor, Jr. Student Scholarship  
Adetoun (Rita) Thompson Alumni Memorial Scholarship  
Robert I. and Angela M. Thompson Endowed Student Scholarship

Michelle E. Turner, Pharm.D. Memorial Scholarship  
William E. (Bill) Wade Endowed Student Scholarship  
Wal-Mart Endowed Student Scholarship  
Wal-Mart Pharmacy Scholarship  
Walgreens Diversity and Inclusion Excellence Award  
Walgreens Diversity Scholarship  
Kenneth M. Ward Endowed Memorial Scholarship  
Grace Waters Endowed Student Scholarship  
Grace and Kenneth L. Waters Scholarship  
Jake and Willa Weathersby Scholarship  
Lee Webb III Scholarship  
M.W. Williamson Scholarship  
R.C. Wilson Pharmaceutical Association  
William T. (Billy) Wolfe Student Scholarship  
Alan and Carla Wolfgang Endowed Student Scholarship  
Kevin and Tanya Woody Student Scholarship and Entrepreneurial Fund  
James L. Youngblood Scholarship

Scholarships and amounts are subject to change based on availability. To view all scholarships, follow the links below.

- Annual non-endowed scholarships: <http://rx.uga.edu/students/current-pharmd-students/list-of-annual-non-endowed-scholarships/>
- Endowed scholarships: <http://rx.uga.edu/students/current-pharmd-students/list-of-endowed-scholarships/>



## **PRE-PHARMACY CURRICULUM**

For specific course descriptions and prerequisites, see the University of Georgia online bulletin at <http://www.bulletin.uga.edu>.

	<u>Credit Hours</u>	<u>UGA Equivalent Course</u>
<b><u>SCIENCES (36 hours)</u></b>		
General Chemistry I w/Lab	4	CHEM 1211 & 1211L or 1311H & 1311L
General Chemistry II w/Lab	4	CHEM 1212 & 1212L or 1312H & 1312L
Organic Chemistry I w/Lab	4	CHEM 2211 & 2211L or 2311H & 2311L
Organic Chemistry II w/Lab	4	CHEM 2212 & 2212L or 2312H & 2312L
Biochemistry ( <i>lab optional</i> )	3	BCMB 3100 or 4010
Principles of Biology I w/Lab	4	BIOL 1107 & 1107L or 2107H & 2107L
Principles of Biology II w/Lab	4	BIOL 1108 & 1108L or 2108H & 2108L
Microbiology ( <i>lab optional</i> )	3	MIBO 2500, 3000, or 3500
Anatomy and Physiology ( <i>lab optional</i> )	6	CBIO 2200 and 2210

**OR**

Anatomy ( <i>lab optional</i> )	3	CBIO 3010
Physiology ( <i>lab optional</i> )	3	CBIO 3710, PMCY 3000 or VPHY 3100

**QUANTITATIVE REASONING (6 hours)**

Calculus	3	MATH 2200 or 2250
Statistics	3	STAT 2000/2100H

**HUMANITIES & SOCIAL SCIENCES (18 hours)**

English Composition I	3	ENGL 1101
English Composition II	3	ENGL 1102 or 1050H or 1060H
Speech Communication	3	COMM 1110/2150H or 1500/2550H
Economics	3	ECON 2105/H or 2106/H
Social Sciences	6	

**WORLD LANGUAGES & CULTURE (9 hours)**

Select courses from university list 9

<http://bulletin.uga.edu/GenEdCoreBulletin.aspx>

## DOCTOR OF PHARMACY (PHARM.D.) CURRICULUM

### FIRST PROFESSIONAL YEAR

<i>Course Number</i>	<i>Course Title</i>	<i>Credit Hours</i>
<b>Fall Semester</b>		
PHRM 3030	Essentials of Pharmacy Practice I	3
PHRM 3300	Pharmaceutical Calculations	2
PHRM 3310	Principles of Pharmacology I	2
PHRM 3540	Nutrition and Lifestyle Intervention in Pharmacy Practice	2
PHRM 3550	Human Pathophysiology	4
PHRM 3600	Immunology and Biotechnology	2
PHRM 3900	Pharmacy Intercommunications	2
PHRM 3940	Survey of Drug Information	<u>1</u>
		18
<b>Spring Semester</b>		
PHRM 3040	Essentials of Pharmacy Practice II	3
PHRM 3070	Medicinal Chemistry I	2
PHRM 3320	Principles of Pharmacology II	2
PHRM 3500	Career Opportunities in Pharmacy	1
PHRM 3520	Interpreting Clinical Laboratory Tests	1
PHRM 3750	Pharmacy and the United States Health Care System	3
PHRM 3820	Self-Care, Nonprescription Drugs, and Herbal Products	3
PHRM 3950	Introductory Pharmacy Practice Experience I	<u>3</u>
		18

## SECOND PROFESSIONAL YEAR

<i>Course Number</i>	<i>Course Title</i>	<i>Credit Hours</i>
<b>Fall Semester</b>		
PHRM 4030	Essentials of Pharmacy Practice III	3
PHRM 4060	Medicinal Chemistry II	2
PHRM 4200	Fundamentals of Pharmaceutics I: Physical Pharmacy and Dosage Form Design	3
PHRM 4430	Principles of Pharmacology III	3
PHRM 4700	Statistical Approaches to Drug Literature Evaluation	2
PHRM 4870	Pharmacotherapy I	3
Electives		<u>2</u>
		18
<b>Spring Semester</b>		
PHRM 4040	Essentials of Pharmacy Practice IV	3
PHRM 4180	Infectious Disease & Antitumor Agents	3
PHRM 4211	Pharmaceutics II: Biopharmaceutics and Pharmacokinetics	4
PHRM 4300	Physical Assessment	2
PHRM 4880	Pharmacotherapy II	3
Electives		<u>2</u>
		17
<b>Summer Semester</b>		
PHRM 4650	Health System IPPE	3

### THIRD PROFESSIONAL YEAR

<i>Course Number</i>	<i>Course Title</i>	<i>Credit Hours</i>
<b>Fall Semester</b>		
PHRM 5160	Applied Pharmacy Practice I	2
PHRM 5390	Pharmacogenomic Therapies	2
PHRM 5650	Pharmacy Care Management	2
PHRM 5750	Drug Interactions and Adverse Drug Reactions	2
PHRM 5880	Pharmacotherapy III	4
PHRM 5920	Clinical Seminar	(1)
Electives		<u>4</u>
		16-17
<b>Spring Semester</b>		
PHRM 5170	Applied Pharmacy Practice II	2
PHRM 5420	Pharmacy Health Services Outcomes	2
PHRM 5560	Integrated Patient Care	2
PHRM 5680	Pharmacy Law and Ethics	2
PHRM 5890	Pharmacotherapy IV	4
PHRM 5920	Clinical Seminar	(1)
PHRM 5950	Advanced Drug Information and Drug Policy Management	2
Electives		<u>3</u>
		17-18

## FOURTH PROFESSIONAL YEAR

<i>Course Number</i>	<i>Course Title</i>	<i>Credit Hours</i>
----------------------	---------------------	---------------------

The fourth year consists of full-time advanced pharmacy practice experiences in institutional, community, and other patient care settings.

### Summer Semester

PHRM 5901	Required Advanced Pharmacy Practice Experience I	5
PHRM 5902	Required Advanced Pharmacy Practice Experience II	<u>5</u>
		10

### Fall Semester

*(Student completes 3 of 4 Fall experiences)*

PHRM 5903	Required Advanced Pharmacy Practice Experience III	5
PHRM 5904	Required Advanced Pharmacy Practice Experience IV	5
PHRM 5905	Required Advanced Pharmacy Practice Experience V	5
PHRM 5906	Required Advanced Pharmacy Practice Experience VI	<u>5</u>
		15

### Spring Semester

PHRM 5907	Required Advanced Pharmacy Practice Experience VII	5
PHRM 5908	Required Advanced Pharmacy Practice Experience VIII	5
PHRM 5909	Required Advanced Pharmacy Practice Experience IX	<u>5</u>
		15

## COURSE DESCRIPTIONS

### PHARMACEUTICAL AND BIOMEDICAL SCIENCES

Pharmaceutical and Biomedical Sciences encompasses the basic science components related to pharmacy and medicine. Specialized areas within Pharmaceutical and Biomedical Sciences include the molecular design and synthesis of pharmacologic agents, development of analytical methodology, determination of physical and chemical properties of drug molecules, assessment of pharmacologic and toxicologic activities of drugs and chemicals, design and formulation of drug delivery systems, and characterization of the pharmacokinetics and metabolism of drugs.

#### Required Professional Courses

**PHRM 3070. Medicinal Chemistry I.** 2 hours.

Prerequisite for PHRM 3070: PHRM 3310

Drugs acting on the peripheral nervous system and cardiovascular system, including structure-activity relationships, mechanisms of action, storage, and chemical stability reactions.

**PHRM 3300. Pharmaceutical Calculations.** 2 hours.

Mathematical principles and quantitative methods utilized in the contemporary practice of pharmacy. Calculations required in the quantitative development and assessment of prescriptions, dosage forms, drug delivery systems, and drug therapy modalities applicable to pharmacy practice.

**PHRM 3310, 3320. Principles of Pharmacology I, II.** 2 hours each.

Prerequisites for PHRM 3320: PHRM 3310 and PHRM 3550

Corequisite for PHRM 3320: PHRM 3070

PHRM 3310: Principles of pharmacology, including pharmacodynamics, pharmacokinetics, and drug metabolism. Actions of agents on the autonomic nervous system and significant nonprescription drugs.

PHRM 3320: Neuropharmacology and major classes of drugs acting on the central nervous system, including the clinical indication(s), mechanism and site of action, side effects, and potential drug interactions.

**PHRM 3550. Human Pathophysiology.** 4 hours.

Common human diseases and their pathophysiology (at the cell, tissue, organ, and system levels). Emphasis on the etiology of the disease, the symptoms, diagnosis, and classification. Introduction to drugs used to treat these diseases.

**PHRM 3600. Immunology and Biotechnology.** 2 hours.

Structure and function of the immune system and therapeutic products of biotechnology that are appropriate in patient counseling and treatment plans.

**PHRM 4060. Medicinal Chemistry II.** 2 hours each.

Prerequisite: PHRM 3070

Corequisite: PHRM 4030 and PHRM 4430

Central nervous system drugs, including their physio-chemical properties, structure-activity relationships and toxicities, side effects, and drug interactions.

**PHRM 4200. Fundamentals of Pharmaceutics I - Physical Pharmacy and Dosage Form Design.** 3 hours.

Corequisite: PHRM 4030

Fundamentals of physical pharmacy and pharmaceutical dosage form design.

**PHRM 4430. Principles of Pharmacology III.** 3 hours.

Prerequisite: PHRM 3320

Corequisite: PHRM 4060

Pharmacological principles of drugs which affect the cardiovascular system, the endocrine system, the skin, bones, the GI system, and neurodegenerative diseases. Principles of toxicology will also be discussed.

**PHRM 5390. Pharmacogenomic Therapies.** 2 hours.

Prerequisites: PHRM 3550 and PHRM 4880

The course will emphasize the principles and applications of pharmacogenomics, including avoiding unnecessary adverse events and tailoring appropriate medications to patients since these activities are a critical part of administering medication.

Elective Courses

**PHRM 5040. Antiviral Chemotherapy.** 2 hours.

Prerequisite: PHRM 4180 or Permission of department

An in-depth discussion of human viral disease and the management of these diseases.

**PHRM 5190. Anticancer Therapeutics.** 2 hours.

This 2nd-year pharmacy elective will provide students with knowledge relating to anticancer therapeutics and patient management. The materials presented will focus on the prescribing basics, adverse effects of anticancer therapeutics necessary for patient management, along with drug administration and some biology of malignant disease.

**PHRM 5240-5240L. Advanced Compounding.** 2 hours

Prerequisites: PHRM 4120, PHRM 4130, PHRM 4200, and PHRM 4211

Novel and traditional dosage forms and advanced principles of pharmaceutics for dosage form preparation and administration.

**PHRM 5350. Disaster Training for Health Care Professionals.** 3 hours.

Prerequisite: Permission of department

Basic first aid and disaster relief training for future pharmacists, other health care professionals, and graduate students. First responders training and mock simulations for weapons of destruction events, including case studies, tabletop exercises, and mass casualty medical response.

## CLINICAL AND ADMINISTRATIVE PHARMACY

The Department of Clinical and Administrative Pharmacy seeks to provide students with the knowledge and problem solving skills needed to deliver pharmaceutical care. Courses focus on the general areas of pharmacy administration and pharmacy practice. These areas provide the means for pharmacy professionals to integrate and apply prior course material to the identification and assessment of patient problems by collecting and utilizing patient information, developing solutions to patients' drug related problems, selecting and recommending therapies, and assessing outcomes. The economic, social, behavioral, and political aspects of developing and providing pharmacy care services are also explored. These areas of study prepare the student to address the complex socio-political and therapeutic challenges associated with ethical drug use.

### Required Professional Courses

**PHRM 3500. Career Opportunities in Pharmacy.** 1 hour.

Pharmacy career pathways, including the necessary career development (i.e., residency/fellowship, CE, board certification, etc.) for each path. Discussions of the role and importance of professional organizations, networking, and professional behaviors necessary to succeed in pharmacy practice.

**PHRM 3520. Interpreting Clinical Laboratory Tests.** 1 hour.

Commonly used laboratory tests for each major organ system and their application for detecting disease, diagnosing medical problems, guiding treatment, and/or monitoring safety and efficacy.

**PHRM 3540. Nutrition and Lifestyle Intervention in Pharmacy Practice.** 2 hours.

Evidence-based principles of nutrition and lifestyle intervention relevant to pharmacy practice.

**PHRM 3750. Pharmacy and the United States Health Care System.** 3 hours.

The social, economic, and political forces that shape the environment in which health care currently is being delivered in America and how this affects the practice of pharmacy.

**PHRM 3820. Self-Care, Nonprescription Drugs, and Herbal Products.** 3 hours.

Prerequisites: PHRM 3030, PHRM 3310, PHRM 3900, and PHRM 3940

Skills to evaluate the needs of a patient who consults a pharmacist for a recommendation of a nonprescription medication or product, including appropriate patient counseling. Guidelines on when to refer to another health care professional.

**PHRM 3900. Pharmacy Intercommunications.** 2 hours.

The skills to effectively communicate with, teach, and counsel patients about their medications and health are taught. Effective communication strategies and skills are presented. Students are challenged to incorporate these skills into their own counseling and communication style. Innovative technology is employed to promote interactive patient counseling.

**PHRM 3940. Survey of Drug Information.** 1 hour.

Primary, secondary, and tertiary drug information resources, including standard reference texts, computer systems and journals. Emphasis will be placed on retrieval of information and communication of a response.



**PHRM 3950. Introductory Pharmacy Practice Experience I.** 3 hours.

Prerequisites: PHRM 3030 and PHRM 3900

Corequisites: PHRM 3040 and PHRM 3820

Development of pharmacy practice skills within the community pharmacy setting. Emphasis will be on prescription processing, communication skills, inventory management, third party insurance processing, student professional development, and time management.

**PHRM 4300. Physical Assessment.** 2 hours.

Corequisite: PHRM 4040

Basic principles and techniques of physical assessment performed by pharmacists.

**PHRM 4650. Health System Introductory Pharmacy Practice Experience.** 3 hours.

Prerequisites: PHRM 3520 and PHRM 4040

Development of pharmacy practice skills in a health system setting, focusing on exposure to health system medication use processes and pharmacy patient care services.

**PHRM 4700. Statistical Approaches to Drug Literature Evaluation.** 2 hours.

Prerequisite: PHRM 3940

Basic statistical methods and analysis used to critically evaluate drug literature are discussed. Topics include statistical inference and hypothesis testing, selection of appropriate statistical tests, correlation and regression analysis, and research design. Students will apply these topics while evaluating published clinical trials, outcome studies, and materials from pharmaceutical manufacturers.

**PHRM 4870, 4880. Pharmacotherapy I, II.** 3 hours each.

Prerequisites for PHRM 4870: PHRM 3040, PHRM 3070, PHRM 3320, PHRM 3520, and PHRM 3550

Corequisites for PHRM 4870: PHRM 4060 and PHRM 4430

Prerequisites for PHRM 4880: PHRM 4030 and PHRM 4870

Corequisite for PHRM 4880: PHRM 4040

PHRM 4870 and PHRM 4880: Pharmacotherapeutic principles and concepts applied to human disease states and conditions with emphasis on case-based problem solving.

**PHRM 5160. Applied Pharmacy Practice I.** 2 hours.

Prerequisites for PHRM 5160: PHRM 4870 and PHRM 4880

Corequisite for PHRM 5160: PHRM 5880

Through a combination of practical experiences in the hospital setting as well as classroom discussions and activities, students will apply knowledge from prior required PharmD courses such as Essentials of Pharmacy Practice, Pharmacotherapy, Drug Information, etc. to a variety of patient care activities.

**PHRM 5170. Applied Pharmacy Practice II.** 2 hours.

Prerequisites for PHRM 5170: PHRM 5160

Corequisite for PHRM 5170: PHRM 5890

As a continuation from Applied Pharmacy Practice I, through a combination of practical experiences in the hospital setting as well as classroom discussions and activities students will apply knowledge from prior required PharmD courses such as Essentials of Pharmacy Practice, Pharmacotherapy, Drug Information, etc. to a variety of patient care activities.

**PHRM 5420. Pharmacy Health Services Outcomes. 2 hours.**

Pharmacy Health Services Outcomes exposes students to medications use from a systems perspective and strategies to improve outcomes. The course will review how personal, social, and organizational factors affect the quality of medication use and outcomes. Students will learn about processes for evaluating medication-use systems and identifying ineffective system operations.

**PHRM 5560. Integrated Patient Care. 2 hours.**

Prerequisites: PHRM 5160 and PHRM 5880

Complex patient cases in which students complete a work-up of a patient, identify and prioritize medication-related problems; and design a regimen, including monitoring parameters to resolve medication-related problems.

**PHRM 5650. Pharmacy Care Management. 2 hours.**

Presentation of management principles, organizational needs, accounting practices, entrepreneurial aspects, marketing needs, and associated topics for use in future pharmacy and health care system practice milieus. The analysis of management principles as they relate to community and health-systems management.

**PHRM 5680. Pharmacy Law and Ethics. 2 hours.**

Corequisite: PHRM 5170

Laws and regulations that govern the practice of pharmacy, including those of patient care, professional conduct, business conduct, hospital practice, and the dispensing and provision of pharmaceuticals.

**PHRM 5750. Drug Interactions and Adverse Drug Reactions. 2 hours.**

Prerequisites: PHRM 4870 and PHRM 4880

Most common drug interactions and adverse drug reactions with an emphasis on detection, prevention, and management.

**PHRM 5880, 5890. Pharmacotherapy III, IV. 4 hours each.**

Prerequisites for PHRM 5880: PHRM 4870 and PHRM 4880

Prerequisites for PHRM 5890: PHRM 5880

PHRM 5880 and PHRM 5890: Pharmacotherapeutic principles and concepts applied to human disease states and conditions with emphasis on case-based problem solving.

**PHRM 5901-5909. Required Pharmacy Clerkship I-IX. 5 hours each.**

Prerequisite: All required and elective Pharm.D. coursework

Clinical practice in outpatient and inpatient settings with emphasis on pharmaceutical care.

These courses will meet for forty hours a week for five weeks (total of 200 contact hours) during the semester.

**PHRM 5920. Clinical Seminar. 1 hour.**

Prerequisite: PHRM 4700

Elements of an effective clinical presentation, including the use of slides, overheads, handouts, and other visual aids; methods of answering audience questions; steps to evaluate the presentation.

**PHRM 5950. Advanced Drug Information and Drug Policy Management.** 2 hours.

Prerequisite: PHRM 3940 and PHRM 4700.

Advanced concepts of drug information provision, including newsletter publication, ADR monitoring systems, drug usage evaluation, formulary management, and drug information retrieval and analysis.

#### Elective Courses

**PHRM 4740. P&T Committee Drug Evaluation.** 3 hours.

The purpose of this course is to provide students with an opportunity to develop a variety of skills including critical analysis of drug literature, clinical and pharmacoeconomic evaluation of drugs, and written and oral presentation of recommendations. Students will gain experience with the many of the techniques used to make effective formulary decisions in managed care settings.

**PHRM 4750. Pharmaceutical and Health Care Marketing.** 3 hours.

Exploration of current health care and pharmaceutical marketing environment to provide insights into industry operation and career building. Application of general marketing principles to all aspects of health care and pharmaceutical marketing.

**PHRM 5050. Abused Drugs.** 3 hours.

The history, abuse, misuse, effects, and detection of selected drugs. Guest lecturers are invited to present their views on these subjects.

**PHRM 5080. Diabetes Disease Management.** 3 hours.

Prerequisite: Permission of department

Provision of diabetes education/management services to patients.

**PHRM 5100. Nuclear Pharmacy.** 2 hours.

Prerequisite: Permission of department

Procedures and techniques involved in handling and use of radio isotopes in nuclear pharmacy practice.

**PHRM 5130. Entrepreneurship Beyond Dispensing.** 2 hours.

Prerequisite: PHRM 3950

Innovative pharmacy services beyond traditional dispensing practices. Emphasis placed on identifying and evaluating new services, new businesses, and a different way to do “business.”

**PHRM 5180. Pharmacist’s Role in Addiction Management.** 3 hours.

Prerequisite: Permission of department

Topics in addiction pharmacy, including psychiatric medications, addiction treatment management medications, and pain management medications. In-depth discussions of pharmacotherapeutic approaches for the treatment of all psychiatric illnesses, acute and chronic pain syndromes, and behavioral/chemical dependencies.

**PHRM 5250. Entrepreneurship for Pharmacists.** 3 hours.

Prerequisite: Permission of department

Current management and strategic issues in operating an independent pharmacy.

**PHRM 5370. Critical Care Pharmacy.** 1 hour.

Prerequisite: PHRM 4860

In-depth discussions of disease states most commonly encountered in critical care patients and the associated pharmacotherapeutic management of these conditions.

**PHRM 5380. Pediatric Pharmacotherapy.** 2 hours.

An overview of the health care needs of the pediatric patient, including the knowledge and skills to provide pharmaceutical care to pediatric patients in both ambulatory and inpatient settings.

**PHRM 5410. Clinical Pharmacy Topics.** 1 hour.

Topics from Pharmacy Grand Rounds lectures, including specific areas in clinical pharmacy to more global issues in healthcare. Presenters include faculty, guest lecturers, and residents; students provide written analyses of each presentation.

**PHRM 5460. Forensic Pharmacy.** 2 hours.

Application of pharmacy to legal issues, including drug testing, analyzing adverse drug reactions for causation, evaluation of drug interactions, medication errors and drug effects as mitigating factors in criminal activity.

**PHRM 5520. Cancer Awareness and Prevention.** 3 hours.

Prerequisite: PHRM 4850

Public health information on common cancers: breast, cervical, lung, prostate, testicular, leukemia/lymphoma, colon, and skin, focusing on information needed to identify high-risk patients and properly counsel patients on early warning signs and appropriate early diagnostic tests and procedures.

**PHRM 5540. Public Health and the Health Professions.** 2 hours.

Prerequisite: Permission of department

Relationship between the public's health and the health professions, including the role of the health care professional in local, state, and national public health systems, the Healthy People 2010 program, interdisciplinary public health professional teams, and the health care professional's role in prevention programs.

**PHRM 5550. Cases in Neurology.** 2 hours.

Corequisite: PHRM 5860

The use of drug therapy to treat patients with neurologic diseases, including the pharmacotherapy used in treating diseases, disorders or syndromes, and a review of the disorder, therapeutic goals, treatment plans, patient counseling and patient outcome monitoring.

**PHRM 5850. Introduction to Postgraduate Residency Training.** 2 hours.

Prerequisite or corequisite: PHRM 5860

In-depth description of residency training to prepare students to seek and obtain a residency position upon graduation. Course format includes informal lecture, panel discussion, written assignments, and competencies.

## INTERDEPARTMENTAL COURSES

### Required Courses

**PHRM 3030, 3040. Essentials of Pharmacy Practice I, II.** 3 hours each.

Prerequisites for PHRM 3040: PHRM 3030, PHRM 3300, and PHRM 3900

PHRM 3030 and PHRM 3040: Introduction to essential clinical, professional, and practice-based skills needed to provide pharmacy care.

**PHRM 4030, 4040. Essentials of Pharmacy Practice III, IV.** 3 hours each.

Prerequisites for PHRM 4030: PHRM 3040 and PHRM 3520

Corequisite for PHRM 4030: PHRM 4870

Prerequisite for PHRM 4040: PHRM 4030

Corequisites for PHRM 4040: PHRM 4211, PHRM 4300, and PHRM 4880

PHRM 4030 and PHRM 4040: Introduction to essential clinical, professional, and practice-based skills needed to provide pharmacy care.

**PHRM 4180. Drug Therapy of Infectious Disease.** 3 hours.

Corequisite: PHRM 4040

Chemistry, spectrum of activity, place in therapy, stability, incompatibilities, and toxicities of antibacterials, antivirals, and antibiotics.

**PHRM 4211. Pharmaceutics II: Biopharmaceutics and Pharmacokinetics.** 4 hours.

Prerequisites: PHRM 3300 and PHRM 4200

Corequisite: PHRM 4040

Basic concepts associated with drug absorption, distribution, metabolism, excretion, and transport with an emphasis on compartmental modeling related to dosing of drugs. Specific disease states that alter drug disposition.

### Elective Courses

**PHRM 5210. Special Topics in Pharmacy.** 1-3 hours. Repeatable for maximum 12 hours credit.

Prerequisite: Permission of department.

Specialized pharmaceutical systems, processes and techniques, including assignment of current literature and student presentations.

**PHRM 5580. Academic Pharmacy.** 2 hours.

Corequisite: 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> year Pharm.D. student

Designed to better acquaint students with career opportunities in academic pharmacy and to provide a forum for students to explore issues pertaining to the structure and function of colleges of pharmacy.

**PHRM 5980. Undergraduate Research Problem.** 1-3 hours. Repeatable for maximum 12 hours credit.

Prerequisite: Permission of department

An introduction to research methods. A problem will be assigned and the student will perform library and laboratory work and write up results.

## **PRACTICE EXPERIENCE**

The experience programs are designed to develop professional practice skills in a variety of patient care settings. It is divided into two components: introductory and advanced pharmacy practice experiences. Students should view each experience as an opportunity to incorporate learned didactic information into the development of the skills necessary to be a competent pharmacy practitioner.

Introductory pharmacy practice experiences (IPPEs) are incorporated into courses offered during the first three years of the Doctor of Pharmacy curriculum. These experiences are designed to provide students with a better understanding of how pharmacy relates not only to patients but also to other health care disciplines. A variety of teaching strategies are utilized to provide experiences both on and off campus. Students should be aware that experiences may be scheduled outside of normal class time. There are two 3-week experiential blocks assigned during the curriculum, one in community and one in health system pharmacy. Efforts will be made to place students at approved sites within a 50 mile radius of their preferred Georgia locations. However, this is subject to site and preceptor availability. Other IPPEs completed during the Doctor of Pharmacy program include, but are not limited to, ambulatory care, immunization administration, inpatient pharmacy care services, pharmacy residency exposure, standardized patients, disaster preparedness and professional advocacy.

Advanced pharmacy practice experiences (APPEs) comprise the final three semesters of the Doctor of Pharmacy program. Students assigned to one of the 2+2 programs will attend P3 classes at their respective satellite campuses and complete their P3 IPPEs and P4 APPEs within the assigned geographic region. For all other students, a matching system is used during the P3 fall semester to assign students to available P4 APPE regions within Georgia. Space within these regions is limited and quotas will be set each year based upon available sites and class size. Students will be assigned to one region for the entire P4 year. Of note, over 75% of students in the lottery have been placed in one of their top 3 APPE regions over the past several years. In order to be fair to all, this policy relies on random selection. We will only consider special circumstances when required by law or Board of Regents/University of Georgia policies. Within the P4 year, students receive extensive training in various inpatient and outpatient settings. The majority of experiences occurs in teaching hospitals, community hospitals, community pharmacies, home health settings, nursing homes, public health agencies, and managed care companies. Students apply the knowledge and skills gained in the first 3 years of the curriculum to design, implement, monitor, evaluate, and modify patient pharmacotherapeutic plans based upon scientific principles to ensure effective, safe, and economical patient care.

In order to be eligible to participate in the experience program activities, students must submit proof of the following: immunizations (MMR, Tdap, tetanus, immunity for hepatitis B, varicella zoster immunization or immunity), tuberculosis testing, a valid Georgia pharmacy intern license, physical exam, CPR certification, professional liability insurance, and health insurance coverage. Some practice sites require students to obtain/undergo a criminal background check and/or drug screening prior to beginning an experience. Students whose background check and/or drug screen results do not meet the site acceptance requirements will be prohibited from completing an experience at that site which could subsequently lead to a delay in student progression.

Students are responsible for costs associated with any of these or other site clearance requirements.

Students should be aware that these requirements are subject to change as alterations occur in the affiliation agreements with participating practice sites.

Possible advanced practice experiences in the fourth year include:

Ambulatory Care	Gastroenterology	Obstetrics/Women's Health
Automation	Geriatrics	Oncology
Cardiology	Home Health Care	Pediatrics/Neonatology
Community Pharmacy Practice	Hospital Pharmacy Practice	Pharmacokinetics
Compounding	Industry	Pharmacy Administration
Consultant Pharmacy	Infectious Disease	Psychiatry
Critical Care/Operating Room	Internal Medicine	Public Health
Drug Information/Medication Utilization Evaluation	Managed Care	Research
Emergency Medicine	Neurology	
Family Medicine	Nuclear Pharmacy/ Radiology	

### **PHARMACY INTERNSHIP**

In order to become licensed to practice pharmacy in the state of Georgia, 1500 hours of internship must be earned as a pharmacy intern; credit for internship may be received only after a student has been licensed by the Georgia State Board of Pharmacy as a pharmacy intern. Application for a pharmacy intern license can only be made once a student has enrolled in a college of pharmacy. An intern license is required for participation in all patient care experiences.

The Georgia Board of Pharmacy, 2 Peachtree Street, NW 6<sup>th</sup> Floor, Atlanta, GA 30303 (Phone: 404-651-8000), must be contacted in order to receive an intern license. Applications can be obtained from the Board of Pharmacy website at <https://gbp.georgia.gov/>.

## **STUDENT ORGANIZATIONS**

### **ACADEMY OF MANAGED CARE PHARMACY**

The Academy of Managed Care Pharmacy (AMCP) is a professional association of pharmacists and associates who serve patients and the public through the promotion of wellness and rational drug therapy by the application of managed care principles. AMCP empowers their members to develop leadership, clinical, and business skills through varied opportunities at the local, regional, and national level.

### **ACADEMY OF STUDENT PHARMACISTS**

The Academy of Student Pharmacists (ASP) is the UGA subdivision of the national Academy of Student Pharmacists, which is the national professional society of pharmacy students in the United States and an official subdivision of the American Pharmacists Association (APhA). ASP is the professional organization in which you have a voice that can be heard from local chapter meetings to state, regional, and national meetings.

### **CHRISTIAN PHARMACISTS FELLOWSHIP INTERNATIONAL**

The Christian Pharmacists Fellowship International (CPFI) is an interdenominational ministry of individuals working in all areas of pharmaceutical service and practice. The mission of CPFI is to bring about spiritual growth and the advancement of knowledge and ethics in the service and practice of pharmacy by providing the resources, tools, and expertise necessary to challenge, encourage, and promote the integration of Christian principles and standards within that practice.

### **COLLEGE OF PSYCHIATRIC AND NEUROLOGIC PHARMACISTS**

The College of Psychiatric and Neurologic Pharmacists is dedicated to shedding light on the issues facing psychiatric and neurologic pharmacy. Its main goal is to spread awareness to students and the community.

### **DEAN'S STUDENT ADVISORY COUNCIL**

The Dean's Student Advisory Council (DSAC) serves as a resource for the Dean pertaining to the enhancement of the College of Pharmacy, its programs, and the profession of pharmacy. The president and vice president (or equivalent) of each of the student organizations in the College and two members from each professional year make up the membership of the DSAC.



## **GEORGIA SOCIETY OF HEALTH-SYSTEM PHARMACISTS**

The UGA student chapter of the Georgia Society of Health-System Pharmacists (GSHP) serves as a forum to provide students with information on careers in hospital pharmacy and other organized health care delivery systems. Speakers from area hospitals discuss subjects related to institutional pharmaceutical care and offer insight into specific areas of hospital pharmacy practice.

## **KAPPA PSI**

Kappa Psi is a national pharmaceutical fraternity which had its beginning in 1879. Since that time, the brothers of Kappa Psi have formed a total of more than 95 collegiate chapters and 69 graduate chapters. At UGA, the Gamma Phi chapter was chartered in 1951 and became the forty-fourth collegiate chapter nationally.

## **LAMBDA KAPPA SIGMA**

Lambda Kappa Sigma (LKS) is a progressive and growing international professional fraternity for pharmacy women. It is a vital and significant force among pharmacy women and has the distinction of being the oldest and largest pharmaceutical fraternity for women in the world. The Alpha Kappa chapter at UGA was established in 1958.

## **NATIONAL COMMUNITY PHARMACISTS ASSOCIATION**

The National Community Pharmacists Association (NCPA) is a national group which represents the interests of independent pharmacy. It is the goal of our student chapter to educate the student body on the opportunities that independent pharmacy provides and enable them through networking and other activities to be able to take advantage of the opportunities available.

## **PHI DELTA CHI**

Phi Delta Chi is a coed professional fraternity of pharmacy whose goals are to advance our chosen profession and to foster a feeling of brotherhood. Founded in 1883 at the University of Michigan, Phi Delta Chi was the first Greek letter organization established for members of pharmacy only. The UGA chapter, Alpha Iota, was founded in 1937.

## **PHI LAMBDA SIGMA**

Phi Lambda Sigma, the Pharmacy Leadership Society, was founded in 1965 at Auburn University. The society is presently the only organization of its kind in existence. The Delta chapter of Phi Lambda Sigma was organized at UGA in 1974.

## **RHO CHI SOCIETY**

The Rho Chi Society is the national pharmacy honor society that recognizes academic excellence of pharmacy students. Students must have completed at least four semesters in pharmacy and have a grade point average in the top 20% of their class. The Alpha Kappa chapter was founded at UGA in 1948.

## **STUDENT COLLEGE OF CLINICAL PHARMACY**

The mission of the Student College of Clinical Pharmacy is to educate student pharmacists about opportunities to further their careers both during and after pharmacy school and to further develop student member's clinical skills by reviewing various educational topics. Meetings often include information on clinical pharmacy topics, residencies, and research opportunities.

## **STUDENT DIABETES CLUB**

The Student Diabetes Club (SDC) is a newly founded organization that promotes an increased understanding of diabetes, a disease state that affects over 25 million children and adults in the United States. Our objective is to encourage pharmacy students to become more clinically oriented to diabetes care through education and through community outreach.

## **STUDENT NATIONAL PHARMACEUTICAL ASSOCIATION**

The Student National Pharmaceutical Association (SNPhA) is an educational and service organization dedicated to the pharmacy profession, professional development, and the full participation of a diverse student body in pharmacy and other health-related professions.

## **STUDENT ONCOLOGICAL ADVOCATES IN PHARMACY**

Student Oncological Advocates in Pharmacy (SOAP) is a professional organization at the University of Georgia that was founded in fall of 2012. Its main purpose is to increase awareness of cancer, treatment of cancer, and the people behind the disease. SOAP's primary philanthropic organization is the Winship Cancer Institute at Emory University Hospital in Atlanta.

## **STUDENT SOCIETY OF PEDIATRIC ADVOCATES**

The mission of Student Society of Pediatric Advocates (SSPA) is to bring awareness to the proper use of medication therapy in pediatric populations through various service and education-based initiatives. Overall, SSPA advocates for the safety and happiness of young patients while learning and having fun along the way.

## CONTACT INFORMATION

### PHARM.D. ADMISSIONS

Office of Student Affairs  
College of Pharmacy  
The University of Georgia  
Pharmacy South 115  
250 W. Green Street  
Athens, GA 30602  
Phone: 706-542-5278  
Email: [admissions@rx.uga.edu](mailto:admissions@rx.uga.edu)  
Website: [www.rx.uga.edu](http://www.rx.uga.edu)

### UNIVERSITY HOUSING

The University of Georgia  
Creswell Hall  
415 Baxter Street  
Athens, GA 30602  
Phone: 706-542-1421  
Website: [www.uga.edu/housing](http://www.uga.edu/housing)

### STUDENT ACCOUNT PAYMENTS

Bursar and Treasury Services Division  
The University of Georgia  
Business Services Building  
424 E. Broad Street  
Athens, GA 30602  
Phone: 706-542-2965  
Website: <http://busfin.uga.edu/bursar/>

### UNDERGRADUATE ADMISSIONS

Office of Undergraduate Admissions  
The University of Georgia  
Terrell Hall  
210 S. Jackson Street  
Athens, GA 30602  
Phone: 706-542-8776  
Website: [www.admissions.uga.edu](http://www.admissions.uga.edu)

### FAMILY AND GRADUATE HOUSING

University Village Housing Office  
The University of Georgia  
710 East Campus Road  
Athens, GA 30602  
Phone: 706-542-1473  
Website: [www.uga.edu/housing](http://www.uga.edu/housing)

### SCHOLARSHIPS AND LOANS

Office of Student Financial Aid  
The University of Georgia  
220 Holmes/Hunter Academic Building  
Athens, GA 30602  
Phone: 706-542-6147  
Website: <https://osfa.uga.edu/>