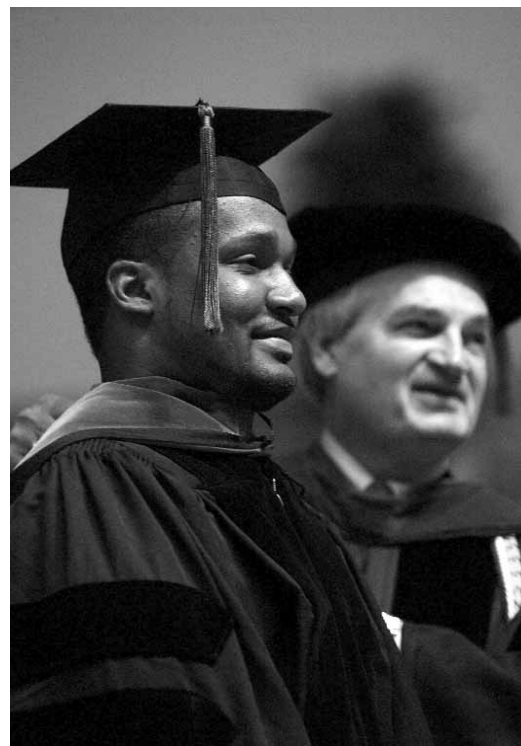


# McWhorter School of Pharmacy





## Administration

Bobby G. Bryant, Fred E. McWhorter Dean and Professor  
H. Anthony McBride, Associate Dean for Academic Affairs, Professor  
Marshall E. Cates, Assistant Dean for Student Affairs, Professor  
Susan P. Alverson, Associate Dean for Student and Alumni Affairs, Assistant Professor  
Charles D. Sands, III, Chair, Pharmacy Practice, Associate Professor  
Robert P. Henderson, Vice Chair, Pharmacy Practice, Professor  
C. Scott Asbill, Chair, Pharmaceutical, Social and Administrative Sciences,  
Associate Professor  
Stuart A. Capper, Director, Institute for Public Health and Pharmacy, Professor  
Michael G. Kendrach, Director, Global Drug Information Center, Professor  
Mary R. Monk-Tutor, Director of Assessment, Professor

## Faculty

Renee M. DeHart, Professor  
Roger D. Lander, Professor  
Robert H. Schrimsher, Professor  
Pamela J. Sims, Professor  
Timothy E. Welty, Professor  
Kimberley W. Benner, Associate Professor  
Amy E. Broeseker, Associate Professor  
Gary W. Bumgarner, Associate Professor  
Valerie T. Prince, Associate Professor  
Robert M. Riggs, Associate Professor  
Condit F. Steil, Associate Professor  
Paula A. Thompson, Associate Professor  
Teresa A. Wilborn, Associate Professor  
Mary Worthington, Associate Professor  
John J. Arnold, Assistant Professor  
Jennifer W. Beall, Assistant Professor  
Erika M. Cretton-Scott, Assistant Professor  
Danielle L. Cruthirds, Assistant Professor  
B. Dee Ann Dugan, Assistant Professor  
Maisha Kelly Freeman, Assistant Professor  
Michael D. Hogue, Assistant Professor  
Sean R. King, Assistant Professor  
Jeffrey A. Kyle, Assistant Professor  
Michael W. Lee, Assistant Professor  
David R. Luthin, Assistant Professor  
Patricia Baldone Naro, Assistant Professor  
D'Andrea F. Skipwith, Assistant Professor  
Angela Roberts Thomason, Assistant Professor  
Bruce A. Waldrop, Assistant Professor  
Emily I. Warren, Assistant Professor  
Mark W. Todd, Affiliate Professor

## History

The McWhorter School of Pharmacy of Samford University was established January 31, 1927, in Birmingham, Alabama as the Howard College Department of Pharmacy. The Department grew steadily and became the Division of Pharmacy in 1938. Designation as the Samford University School of Pharmacy occurred in 1965 when Howard College reorganized to become Samford University. In 1995, Samford University Trustees authorized naming the school the McWhorter School of Pharmacy of Samford University in recognition of the generous support of alumnus R. Clayton McWhorter ('55) and his family. In 2002, the School celebrated its 75th year of operation.

## Mission and Vision

The mission of the Samford University McWhorter School of Pharmacy is to nurture and prepare pharmacists by providing exemplary education to improve society's health and the well being of humankind, as provided in a Christian context and shown through example, scholarship, and service to others.

The vision of the Samford University McWhorter School of Pharmacy is to empower pharmacy professionals to improve health worldwide by exhibiting the highest standards of quality in education, scholarship, practice, and service, and to be a leader among schools of pharmacy in meeting the challenges of health care in the future.

## Curriculum Outcome

A doctor of pharmacy graduate from McWhorter School of Pharmacy is one who is prepared to:

- Render exemplary pharmaceutical care
- Succeed in a postgraduate training or degree program
- Pursue life-long learning
- Advance the practice and profession of pharmacy

## Accreditation

The McWhorter School of Pharmacy is accredited by the Accreditation Council for Pharmacy Education, 20 North Clark Street, Suite 2500, Chicago IL 60602, telephone (312) 664-3575. Web address: [www.acpe-accredit.org](http://www.acpe-accredit.org).

## Academic Program and Requirements

### Degree

Doctor of Pharmacy (Pharm.D.)

### Admission Policies

For the most up-to-date information on admissions policies, please visit our Web site at [www.samford.edu/schools/pharmacy.html](http://www.samford.edu/schools/pharmacy.html).

All communications regarding admission should be directed to the director of external relations and pharmacy admissions in the McWhorter School of Pharmacy (MSOP). Applications are considered on a competitive basis by the School of Pharmacy Admissions Committee. The committee meets regularly beginning in January and notifies applicants as decisions are made. No student can be considered for admission to the program until 20 semester credits of core math and science coursework and 45 credits of total coursework have been completed. Applicants must have completed the first course in organic chemistry to be considered. Dual-enrollment courses, those courses taken while in high school for both college and high school credit, will not be accepted by the MSOP as fulfilling any admission prerequisites. Applicants to the pharmacy school must have a 2.75 grade point average (GPA) overall at the time of application and complete all coursework in the pre-pharmacy curriculum with at least a 2.75 GPA both overall and in required math and science courses to meet admissions standards. A prior baccalaureate degree is preferred. Students with better admissions profiles are given admissions priority. Applicants who are international students, or American citizens who learned English as a second language, must demonstrate satisfactory written and verbal communication skills in English as a part of the admissions process.

For an applicant to be considered for admission, all admission materials must be submitted by **February 1**. This deadline may be extended if the entering class is not filled. To make application to the McWhorter School of Pharmacy, the applicant must complete the national online application at [www.PharmCAS.org](http://www.PharmCAS.org). References are processed through PharmCAS. This online process allows the

applicant to apply to approximately 50 pharmacy schools throughout the nation. Official transcripts, essay, and PCAT scores are sent to PharmCAS and then forwarded to every pharmacy school the applicant designates. The link to the online supplemental application is located at our Web site: [www.samford.edu/schools/pharmacy.html](http://www.samford.edu/schools/pharmacy.html). The PCAT and ACT **or** SAT score are required. The ACT/SAT score should be sent directly to the MSOP and **not** PharmCAS. Waiver of the ACT/SAT is granted to the applicant who has earned a prior B.S. or B.A. degree, is over thirty years of age, or if English is the applicant's second language. See page four of the supplemental application for more information. After an applicant is notified of acceptance, but before he or she enrolls in the pharmacy school, official transcripts must be sent directly to Samford University. Applicants are encouraged to visit the school while their applications are under consideration. An interview on campus at the applicant's expense is required for applicants invited for admission consideration.

Final decisions regarding admission are made by May 15. Students may be accepted from a rank-ordered alternate list approved for admission after this date if previously accepted students decline the opportunity to enter the program. Students who are notified of acceptance to the pharmacy school must return a deposit of \$450 within a specified period of time to reserve a place in the class. The \$450 deposit is not refundable but will apply toward tuition for the first semester in residence.

Students who have been accepted by the pharmacy school may be denied admission just prior to or at the time of enrollment for: (1) failure to submit final transcripts of all college work completed at another institution, (2) a significant drop in grade point average, or (3) failure to meet any academic stipulations set forth in the letter of acceptance, and/or (4) proven behavior that is not well-suited for the responsibilities and privileges embodied in the practice of pharmacy.

Students are expected to be competent in a word processing and a spreadsheet program prior to entrance into the school. Samford University supports the Microsoft Office Suite software. After notification of admission to the pharmacy school, students are expected to learn medical terminology on a self-study basis and be prepared for a proficiency examination during the introductory week at the start of the fall semester.

### Technical Standards for Admission to MSOP

The mission for the Samford University McWhorter School of Pharmacy (MSOP) is to nurture and prepare persons within a Christian environment to be exemplary pharmacists and to improve health worldwide through innovative pharmacy practice, scholarship and service. In order to comply and proceed with the mission of MSOP, technical standards for admission are a necessity, which ensures the education of pharmacists who facilitate competent patient care and professional services in all facets of healthcare. Students admitted to MSOP must possess the intellectual, emotional, and physical abilities, with reasonable accommodations as needed for those with disabilities, to acquire the knowledge, behaviors, and skills needed to complete the core curriculum of MSOP. These standards are essential to ensure the competencies of graduates of MSOP. Each applicant of MSOP will be assessed in the academic and technical standards set forth by the admissions committee, notwithstanding reasonable accommodations, prior to matriculation.

The doctor of pharmacy (Pharm.D.) degree identifies persons who have completed the curriculum necessary to perform the functions of a pharmacist; thus graduates must convey and demonstrate abilities to preserve the safety and protection of public interests. Moreover, applicants for the Pharm.D. degree must be able, with or without reasonable accommodations, to perform specific essential functions that the faculty deem requisite for the practice of pharmacy. These functions fall into several categories including: communicative, motor, conceptual, integrative, quantitative, behavioral and social. Applicants must also have the physical and emotional stamina to perform in a competent manner in clinical settings that involve heavy workloads and/or stressful stimuli. Furthermore, MSOP has determined those individuals currently impaired by alcohol or substance abuse cannot meet the technical standards.

**I. Communication:** Candidates must be able to speak, hear, and observe patients in a clinical setting. They must be able to record information accurately and clearly, speak fluent English, and communicate effectively and sensitively with patients. Candidates must also be able to communicate effectively, accurately, and without error with other members of the healthcare team in oral and written form, and in patient care settings in which decisions based upon those communications must be made rapidly.

**II. Motor:** A pharmacy student must possess sufficient visual, auditory, tactile and motor abilities to allow him/her to gather data from written reference material, from oral presentations, by observing demonstrations and experiments, by studying various types of medical illustrations, by observing a patient and his/her environment, by observing clinical procedures performed by others, by reading digital or analog representations of physiologic phenomena, and by performing a basic physical examination of a patient. Candidates must have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic maneuvers necessary to complete a general physical exam. Candidates must have the physical ability and manual dexterity to compound sterile and non-sterile products in an environment and manner compliant with existing regulations.

**III. Interpretative, Conceptual, and Quantitative:** Candidates for the Pharm.D. degree must have effective and efficient learning techniques and habits that allow mastery of the complex curriculum. They must be able to learn through a variety of modalities including, but not limited to, classroom instruction, small group activities, individual study, preparation and presentation of reports, and use of computer technology. They must be able to memorize, measure, calculate, reason, analyze, synthesize, transcribe verbal messages accurately, and interpret written prescriptions accurately. Candidates must be able to read, comprehend and respond to serial information related to a medical situation or patient.

**IV. Behavioral, Social and Emotional Attributes:** Candidates must understand the legal and ethical aspects of the practice of pharmacy and function within the guidelines established by the law and by the ethical standards of the pharmacy profession. They must be able to relate to patients and their families, colleagues, and other members of the healthcare team with courtesy, maturity, and respect for the dignity of individuals. This requires that they place the welfare of their patients foremost, and demonstrate honesty, integrity, dedication, compassion and nondiscrimination in the care of their patients. Candidates must, at all times, demonstrate the emotional stability to be able to exercise good judgment, and carry out prompt completion of all responsibilities attendant to the care of their patients in a sensitive and effective manner. This sensitivity includes self-examination of personal attitudes, perceptions, and stereotypes in order to avoid potential negative impact on relationships and patient care. Applicants must be of sufficient emotional health to adapt to changing environments, display flexibility and professional responsibility to their patients, and learn to function in an environment of uncertainty, in which changes may occur rapidly and without warning. An individual with a diagnosed disability may function as a pharmacy student as long as the above technical standards are fulfilled.

**V. Stamina:** The study and ongoing practice of pharmacy may involve taxing workloads and stressful situations. A pharmacy student must have the physical and emotional stamina to maintain a high level of function in the face of such working conditions. In the event of a deteriorating behavioral, social or emotional function, it is essential that a pharmacy student be willing to engage in dialogue with MSOP officials as soon as there is evidence that the student is not meeting the technical standards.

A pharmacy student whose actions or decisions pose a danger to self, patients and/or colleagues will not be allowed to continue in the program unless the student agrees to accept professional help under conditions acceptable to MSOP.

### Required Health Data

All pharmacy students are required to have health insurance and must be able to show proof of insurance prior to beginning any experiential coursework. All pharmacy students accepted into the program will receive a Samford University Health Form and Immunization Record which must be completed and returned to Student Health Services before registering for classes. This includes a physical exam performed by a physician or mid-level provider, laboratory work, and immunization history. Immunization requirements include:

- **Tetanus Diphtheria Pertussis (Tdap)** – All students are required to be immunized with adult Tdap vaccine due to the risk of transmitting pertussis. Based upon guidelines from the Centers for Disease Control and Prevention for receipt of adult Tdap vaccine, if you have received a tetanus antigen-containing vaccine (e.g. Td) within the past two (2) years, you are not required to receive the Tdap vaccine at this time. However, if it has been greater than two years since you received the Td vaccine and you have not yet received a dose of adult Tdap vaccine then you are required to receive one dose of this vaccine before beginning any experiential coursework. Further, some sites require

proof of immunization against Tdap (or Td vaccine within the previous two years immediately prior to beginning your experiential training). Students who provide medical documentation from a physician of current uncontrolled seizure disorders are exempt from this requirement. A Tdap booster lasts for 10 years and will not need to be repeated if you have already received a dose of this vaccine.

- **Measles, Mumps, Rubella (MMR)** – If born on or after January 1, 1957, provide written documentation of two (2) live measles (rubeola) vaccines given no less than one month apart, after the first birthday; or written documentation of laboratory evidence of immunity to rubeola: date and result; or written documentation of physician-diagnosed rubeola infection. **Provide written documentation of vaccination or laboratory evidence of immunity to rubella and mumps: date and result; or written documentation of vaccination or titers.**
- **Tuberculosis (TB) Screening** – Provide written evidence of two-step TB skin test within the past twelve (12) months of any experiential course; i.e., after the initial TB skin test another TB skin test will be performed within two (2) to three (3) weeks. If the second TB skin test is positive, a baseline chest X-ray will be required and a letter from a physician addressing the health status of the student.
- **Hepatitis B** – Provide written documentation of having completed the series of three (3) injections. The first of the three must be obtained before registering for classes. The second and third doses are given at one and six months after the first dose, respectively.
- **Provide written documentation of a positive varicella (chicken pox) titer drawn from a reputable laboratory:** date and result; or written documentation of two (2) varicella vaccines given no less than one month apart and a titer showing their post vaccination immunity status.

All required health data must be submitted to Student Health Services at Samford University. Failure to meet these requirements will prevent the student from registering for the second semester.

Students are eligible to utilize Student Health Services once their health forms and immunization record have been completed and received in their office. Please contact them for a list of services offered. In addition to required vaccinations, all students will be required to have a background check performed and be fingerprinted prior to engaging in any experiential training in the first academic year. Drug testing is required by specified by selected experiential course sites.

### Alabama State Board of Pharmacy Registration

All students, regardless of home state, must register with the Alabama State Board of Pharmacy for an intern/extern license after class begins in the first year. Applications can be found in the Pharmacy Student Handbook, at [www.Albop.com](http://www.Albop.com), or from the Office of the Assistant Dean. This registration will be discussed during orientation for incoming students.

### Tuition and Financial Aid

Students may apply for federal and private financial aid through the University's financial aid office. The McWhorter School of Pharmacy has additional but limited funds available for loans and scholarships. Three types of loan programs are available: a short-term emergency loan administered by the school; a no-interest, revolving-loan fund (The Bernice Cohron Pharmacy Student Loan Fund); and a long-term loan administered by the National Community Pharmacy Association. A number of pharmacy scholarships are available and awarded on the basis of both merit and

## McWhorter School of Pharmacy Organizations

Academy of Managed Care Pharmacy  
 American Pharmacists Association Academy of Student Pharmacists  
 Christian Pharmacy Fellowship  
 Kappa Psi Pharmaceutical Fraternity  
 National Community Pharmacists Association  
 Phi Lambda Sigma (Leadership Society)  
 Rho Chi Society (Academic Honor Society)  
 Student Society of Health-System Pharmacists  
 Student National Pharmaceutical Association

<b>Pre-Pharmacy Curriculum for Transfer Students Required Courses</b>	<b>Course Credits</b>	<b>Total Required Credits</b>
<b>Humanities</b>		<b>12</b>
English Composition	6	
English or American Literature	3	
Religion, New or Old Testament*	3	
<b>Natural and Applied Sciences</b>		<b>34</b>
Calculus**	3	
Anatomy and Physiology**	8	
Microbiology with Lab***	4	
General Chemistry	8	
Organic Chemistry	8	
Statistics (Math Dept)	3	
<b>Social Sciences</b>		<b>6-9</b>
Public Speaking	3	
World History (3) or Western Civilization (3) or U. S. History (6)	3-6	
<b>Liberal Arts</b>		<b>12</b>
Sociology or Psychology	3	
Other Liberal Arts †	9	
<b>Physical Activity</b>		<b>2</b>
Two physical activity courses	2	
<b>Total Required Credits</b>		<b>66-69</b>

\* For students transferring more than 30 hours/credits, a religion course is not required. However, religion course credit may be applied to the liberal arts requirement.

\*\* A prerequisite course may be required by most colleges.

\*\*\* Some schools offer only three hours of credit.

† The remaining credits may be chosen from political science, history, English literature, foreign languages, philosophy, psychology, sociology, geography, economics, religion, and either art, music, or drama appreciation (no more than three credits may be in appreciation courses).

<b>Pre-Pharmacy Curriculum for Samford Students Required Courses</b>	<b>Course Credits</b>	<b>Total Required Credits</b>
<b>Fall Semester I</b>		<b>18</b>
CHEM 205 Foundations of Chemistry	3	
CHEM 206 Foundations of Chemistry Laboratory	1	
MATH 150 Precalculus	4	
UCCA 101 Communication Arts I	4	
UCCP 101 Cultural Perspectives I	4	
UCFH 120 Concepts in Fitness and Health	2	
<b>Spring Semester I</b>		<b>16</b>
BIOL 217 Principles of Human Anatomy	4	
CHEM 215 Fundamentals of Organic Chemistry	3	
CHEM 216 Fundamentals of Organic Chemistry Lab	1	
UCCA 102 Communication Arts II	4	
UCCP 102 Cultural Perspectives II	4	
<b>Summer Term</b>		<b>4</b>
Liberal Arts*	4	
<b>Fall Semester II</b>		<b>16</b>
BIOL 225 Microbiology	4	
CHEM 315 Organic Reactions & Mechanisms	3	
CHEM 316 Organic Reactions & Mechanisms Lab	1	
MATH 240 Calculus I	4	
UCBP 101 Biblical Perspectives	4	
<b>Spring Semester II</b>		<b>16</b>
BIOL 218 Principles of Human Physiology	4	
CHEM 325 Quantitative Analysis	3	
CHEM 326 Quantitative Analysis Laboratory	1	
MATH 210 Elementary Statistics	4	
Liberal Arts*	4	
<b>Total Required Credits</b>		<b>70</b>

\* Choose either SOCI 100 (Introduction to Sociology) or PSYC 101 (General Psychology) for one of the liberal arts requirements. The remaining four credits may be chosen from courses in political science, history, foreign languages, philosophy, psychology, sociology, geography, economics, and either art, music, or theatre appreciation.

need. Part-time work in pharmacy school laboratories is also available for a limited number of students. Students interested in the above-mentioned financial aid opportunities should complete the proper application forms in the Office of the Assistant Dean for Student Affairs in the McWhorter School of Pharmacy.

Students who wish to take non-PHRD courses (undergraduate or graduate) during the academic year will be required to pay the undergraduate or graduate rate upon enrollment. This fee will be in addition to the normal pharmacy tuition. Students will not be allowed to take courses which interfere with pharmacy coursework.

### Student Athletes and ROTC Candidates

The MSOP will cooperate with student athletes and ROTC candidates to accommodate class scheduling to the fullest extent possible. The MSOP cannot, however, alter its program schedule for these students and the pharmacy school schedule takes precedence with any scheduling conflicts.

## Pre-Pharmacy Curriculum

The doctor of pharmacy degree at Samford University requires a minimum of six years of college work consistent with the standards set by the Accreditation Council for Pharmacy Education (ACPE). Candidates have the option of enrolling in Samford University for the entire program or completing up to two years of pre-pharmacy studies elsewhere and then completing the professional curriculum at Samford. Pre-pharmacy courses equivalent to those listed on the following pages may be completed at any accredited junior college, community college, college, or university. Students entering Samford University as freshmen and enrolling in the pre-pharmacy program must follow the Samford pre-pharmacy curriculum, which includes the core curriculum courses unique to Samford University. Students enrolling at other institutions and expecting to transfer to the McWhorter School of Pharmacy should complete the pre-pharmacy curriculum for transfer students. Pre-pharmacy students at other institutions are encouraged to work closely with the pre-pharmacy or health sciences advisor to assure the courses they take are consistent with the pre-pharmacy curriculum. Students are encouraged to contact the director of external relations and pharmacy admissions at the McWhorter School of Pharmacy for answers to specific questions at (205) 726-2982 or (205) 726-4242. It is the student's responsibility to satisfy all prerequisite coursework requirements.

The pre-pharmacy curriculum includes courses in the arts, humanities, and sciences in order to provide students with a well-rounded liberal arts education. All pre-pharmacy courses must be completed prior to entry into the McWhorter School of Pharmacy. Applicants holding a B.S. or B.A. degree and who have completed all mathematics and science requirements in the pre-pharmacy curriculum shall only be required to satisfy the speech and statistics requirement.

Veterans, students over thirty (30) years of age, and students with physical disabilities may petition for special consideration concerning physical education requirements. You may also refer to the Transfer Guide from our Web site at [www.samford.edu/schools/pharmacy.html](http://www.samford.edu/schools/pharmacy.html).

## Professional Pharmacy Curriculum

### Delivery of Curriculum

The Department of Pharmacy Practice is composed of 25 faculty and four staff personnel. The mission of the department is to educate, develop, and mentor students and pharmacists for the advancement of the practice of pharmaceutical care to assure the optimal use of drugs in society. The department collaborates with various health care facilities and community pharmacies in providing the delivery of all the pharmacy experiential education. In addition the department is responsible for delivering the didactic education related to the clinical use of drugs in patients. The focus of all this teaching is the provision of optimal patient care based on sound therapeutic principles and evidence-based data and the promotion of health improvement, wellness, and disease prevention. The department also carries out a rigorous program of clinical and educational research designed to improve the use of drugs in patients and enhance student learning.

<b>Professional Pharmacy Curriculum Required Courses Summary-All Years</b>	<b>Total Required Credits</b>
<b>Year I, Total Required Credits</b>	<b>40</b>
<b>Year II, Total Required Credits</b>	<b>38</b>
<b>Year III, Total Required Credits</b>	<b>36</b>
<b>Year IV, Total Required Credits</b>	<b>34</b>
<b>Total Required Credits for All Years</b>	<b>148</b>

Note: See table at right for a detailed curriculum.

The Department of Pharmaceutical, Social and Administrative Sciences consists of 15 faculty and three staff. The faculty of the department, with expertise in a variety of disciplines including pharmacology, medicinal chemistry, pharmaceuticals, pharmacokinetics, pharmacy administration, and higher education, are responsible for providing the science foundation for the students' education in the professional curriculum. In addition, many of the faculty provide practical, research, and experiential education for the students. The department faculty serves the School and University as advisors to professional, social, and honorary organizations encouraging student involvement in those organizations and developing professionalism and leadership among the students. The faculty exemplify leadership and professionalism through service in leadership roles in professional and scientific organizations. Furthermore, the department faculty are engaged in a number of scholarly activities including research, writing, presentation, and publication.

The professional pharmacy curriculum is designed to inculcate in students the knowledge, skills, and attitudes essential for the practice of pharmacy today, as well as in the future. The doctor of pharmacy degree is a professional degree that provides basic educational preparation required to provide pharmaceutical care and perform managerial functions.

The professional curriculum includes 148 semester credits of didactic and laboratory instruction with approximately 40 weeks (1520 contact hours) of supervised training in various practice settings. All courses in the professional curriculum, including required Early Practice Experiences (EPE) and Advanced Practice Experiences (APE), are to be completed at Samford University.

The professional curriculum requires 32 credits of APE, beginning in June or immediately following the successful completion of all coursework prior to the fourth professional year in the pharmacy curriculum. APEs that must be completed by all students include: PHRD 605 (Ambulatory Care); PHRD 606 (Drug Information); PHRD 607 (Adult Medicine I); PHRD 608 (Adult Medicine II) or PHRD 629 (Medicine Subspecialty); and four additional 600-level APEs. The choice of these may be limited in a given semester due to availability of training sites and preceptors.

The pharmacy school uses active learning (AL) concepts in many of its courses, with the percentage of time devoted to AL dependent upon the adaptability of the course material to these learning methodologies. Certain courses utilize a minimum of AL activity, while other courses are extensively delivered by AL methodologies. Students in each professional year are divided into teams/groups of six to eight students, and team/group work is periodically assigned. The percentage of the final grade for the course from team/group work is clearly stated in the syllabus for each course.

The maximum load for a pharmacy student is 21 semester hours. Full-time status is granted for students taking 12 semester hours. If, for compelling reasons, a student is enrolled in less than 12 semester hours, the university will classify the student as part-time. A student taking less than 12 hours will pay tuition at the hourly rate specified in the Financial Information section of this catalog.

The professional pharmacy curriculum of the McWhorter School of Pharmacy follows the Samford University undergraduate calendar as much as possible, but the School incorporates January in its spring semester. Students enrolled in the professional pharmacy curriculum cannot take courses offered in the University's Jan Term due to class conflicts. Furthermore, the fall semester of the fourth professional year begins the first working day in June. Consequently, students enrolled in the last year of the professional curriculum cannot take courses offered during the summer terms at Samford or another university.

<b>Professional Pharmacy Curriculum Required Courses</b>		<b>Course Credits</b>	<b>Total Required Credits</b>
<b>Year I, Fall</b>			<b>19</b>
PHRD 303	Information Systems	1	
PHRD 304	Calculations	2	
PHRD 305	U. S. Health Care Systems	2	
PHRD 306	Physiological Chemistry	4	
PHRD 308	Physiology and Pathophysiology I	6	
PHRD 310	Pharmacy Dosage Forms Tech I	4	
<b>Year I, Spring I</b>			<b>17</b>
PHRD 307	Clinical Communications	2	
PHRD 309	Physiology and Pathophysiology II	6	
PHRD 311	Pharmacy Dosage Forms Tech II	4	
PHRD 312	Sterile Products	2	
PHRD 313	Infectious Disease I	3	
<b>Year I, Spring II</b>			<b>4</b>
PHRD 301	Early Practice Experience I (EPE)	3	
PHRD 302	Pharmacy Practice	1	
<b>Year I Total Required Credits</b>			<b>40</b>
<b>Year II, Fall</b>			<b>18</b>
PHRD 400	Legal Principles of Pharmacy Practice	2	
PHRD 403	Pharmacology I	5	
PHRD 405	Medicinal Chemistry I	4	
PHRD 407	Therapeutic Drug Management I	4	
PHRD 413	Infectious Disease II	3	
<b>Year II, Spring I</b>			<b>3</b>
PHRD 401	Early Practice Experience II (EPE)	3	
<b>Year II, Spring II</b>			<b>17</b>
PHRD 404	Pharmacology II	5	
PHRD 406	Medicinal Chemistry II	4	
PHRD 408	Therapeutic Drug Management II	4	
PHRD 410	Patient Self-Care and Monitoring I	2	
PHRD 414	Infectious Disease III	2	
<b>Year II Total Required Credits</b>			<b>38</b>
<b>Year III, Fall</b>			<b>18</b>
PHRD 502	Advanced Pharmacy Practice	2	
PHRD 510	Patient Self-Care and Monitoring II	3	
PHRD 521	Therapeutics I	6	
PHRD 524	Fiscal Management	3	
PHRD 527	Drug Literature Evaluation*	1	
PHRD 550	Physical Assessment*	1	
	Elective	2	
<b>Year III, Spring I</b>			<b>18</b>
PHRD 522	Therapeutics II	4	
PHRD 523	Therapeutics III	6	
PHRD 525	Human Resources Management	3	
PHRD 527	Drug Literature Evaluation*	2	
PHRD 550	Physical Assessment*	1	
PHRD 551	Ethics in Christianity and Health Care	2	
<b>Year III Total Required Credits</b>			<b>36</b>
<b>Year IV, June-May**</b>			
<b>Required Advanced Practice Experiences (APE)</b>			<b>20</b>
PHRD 605	Ambulatory Care	4	
PHRD 606	Drug Information	4	
PHRD 607	Adult Medicine I	4	
PHRD 608	Adult Medicine II <i>or</i> a medicine subspecialty APE	4	
PHRD 600-level	Selective Experience	4	
<b>Elective APE</b>			<b>12</b>
	600-level Experience	4	
	600-level Experience	4	
	600-level Experience	4	
<b>Professional Seminars</b>			<b>2</b>
PHRD 615	Professional Seminar I	1	
PHRD 616	Professional Seminar II	1	
<b>Year IV Total Required Credits</b>			<b>34</b>
<b>Total Required Credits</b>			<b>148</b>

\*Both PHRD 527 and PHRD 550 are split over the course of an academic year: one portion is offered in the fall semester; the other portion is offered in the spring.

\*\*Students are required to take eight APEs in ten possible time periods offered during the fourth year.

## Academic Policies

In order to receive a degree, candidates must satisfy all requirements of the McWhorter School of Pharmacy and other applicable requirements of Samford University. A student must successfully complete the entire prescribed curriculum within six academic years from the original date of matriculation, and have a final GPA of at least 2.00 in order to be eligible for the degree. A faculty-student advisory system attempts to inform students of these requirements, but it is the responsibility of the individual student to ensure that all requirements have been met.

Satisfactory academic progress is required of all students to remain in the pharmacy school. Academic standing is determined by the GPA and/or the number of failed courses. Students must complete all required courses at the PHRD 300-500 level and achieve at least a 2.00 GPA in the professional curriculum before entering the Advanced Practice Experience (APE) courses in the fourth professional year.

Unless otherwise stated in the course syllabus, grades are assigned by instructors in the school according to the following scale: 92-100 = A, 90-91 = A-, 88-89 = B+, 82-87 = B, 80-81 = B-, 78-79 = C+, 70-77 = C, 67-69 = D, and below 67 = F. A student may not repeat a pharmacy course unless there is a failure in the course. The minimum passing grade in Advanced Practice Experience (APE) courses is a C and the minimum passing grade in all other pharmacy coursework is a D. The pharmacy school does not round the GPA. Other letter grades that may be assigned and the quality point system utilized by the University are described in this catalog.

All coursework must be completed at the McWhorter School of Pharmacy. Availability of courses is limited to those published in the catalog and offered during the fall and spring semesters.

A student who fails a course or whose cumulative professional GPA is below 2.00 in any academic term will be placed on academic probation. If academic probation is the result of failed coursework, then the student is cautioned that additional failed coursework will result in dismissal from the pharmacy school, either by academic suspension or expulsion, as delineated below. If academic probation is the result of the GPA being less than 2.00, then the student is cautioned that failure to achieve and maintain a cumulative GPA of at least 2.00 at the end of the remaining academic terms will result in academic suspension.

Any student who fails two courses or whose cumulative GPA is below 2.00 for any two academic terms will be suspended, which results in dismissal from the pharmacy school. A student academically dismissed may apply in writing to the Admissions Committee for readmission. The letter should explain the reasons for his/her academic difficulty and what measures have been taken to ensure his/her ability to raise the GPA. Should admission be granted, the student is cautioned against further academic difficulties. If academic suspension is the result of failed coursework, then the student is cautioned that additional failed coursework will result in dismissal from the pharmacy school via academic expulsion. If academic suspension is the result of the GPA being less than 2.00, then the student is cautioned that failure to achieve and maintain a cumulative GPA of at least 2.00 at the end of all remaining academic terms will result in dismissal from the pharmacy school via academic expulsion.

Any student who fails three or more courses or who fails the same course twice or whose cumulative GPA falls below 2.00 for any three academic terms, either sequential or non-sequential, will be expelled, which results in permanent dismissal from the school. Expulsion from the pharmacy school is without recourse. Expelled pharmacy students desiring to remain at Samford University will become subject to University policies on academic progression and retention.

Since the level of a student's academic difficulty, i.e., probation, suspension, and expulsion may be determined by the quantity of failed coursework, multiple failed courses in a given academic term may preclude the need for probation or suspension. In any regard, Samford University rules on continued enrollment at the University prevail.

Students on academic probation or suspension from the McWhorter School of Pharmacy shall not be allowed to serve as officers or committee members in any campus organization, participate in any extracurricular activity sponsored by Samford University which involves the expenditure of an appreciable amount of time, or be employed by any department on the Samford campus. Outside employment for such students is also discouraged.

## Resources

**World Wide Web** – Students are invited to visit the McWhorter School of Pharmacy Web site ([www.samford.edu/schools/pharmacy.html](http://www.samford.edu/schools/pharmacy.html)) for additional information regarding faculty, admissions, curriculum and other useful student information. Centers of Excellence are listed at this Web site, among other topics.

Students may also visit the Samford University main Web site ([www.samford.edu](http://www.samford.edu)) for additional university information such as campus life, admissions, financial aid, and many other useful topics.

**Drug Information Center** – The Drug Information Center serves as a resource center, a drug advisory source for practitioners, and an information retrieval center for students, faculty, and practitioners. In addition to a variety of journals, books, and other printed materials, major pharmaceutical and medical databases and many electronic reference materials are available. The University's Davis Library also provides online reference services.

**Institute for Public Health and Pharmacy** – A university-wide research, service, and educational organization that provides opportunities for faculty, students, and others to participate in interdisciplinary scholarship. The mission of the Institute for Public Health and Pharmacy is to further the interactions between the professions of pharmacy and public health with the basic goal of increasing the utilization and effectiveness of pharmacist-enabled preventive health services in Alabama and the region, thereby improving the health status of our communities. Activities of the institute include extramurally funded research projects as well as projects to evaluate the delivery of various pharmacy-related public health services. The institute also sponsors the only public health pharmacy residency program in the United States. In addition, the institute seeks to further the work of Samford University faculty and students in their mission to collaborate with the public health system to improve access to preventive health services in severely underserved communities of Alabama.

**Student Computer Facilities** – Houses approximately 25 state-of-the-art Pentium computers that contain various drug information databases for course work and research. The University also has several computer labs on campus. The Curriculum Materials and Technology Center is also equipped to produce many kinds of visual materials.

## Courses

### PHRD 301 and 401 Early Practice Experience (EPE) I-II (3 each course)

Two-course sequence designed to provide pharmacy practice experience early in a student's career. Offered: Spring.

### PHRD 302 Pharmacy Practice (1)

Presentation of basic practice-related information, including demonstration of how pharmacy practice systems interface with physiological concepts of disease processes and chemical features of drug therapy for effective pharmacy service. Relevant calculations, computer systems, and other related technology included to present the application to basic prescription service and pharmacy practice. Offered: Spring.

### PHRD 303 Information Systems (1)

Introduction to information systems available to the practicing pharmacist, including information retrieval systems available through the Davis Library and the Samford University Global Drug Information Center. Offered: Fall.

### PHRD 304 Calculations (2)

Presentation of the basic elements of applied pharmaceutical mathematics, including weights and measures, calculation of doses, methods of expressing concentration, and interconversion between units. Offered: Fall.

### PHRD 305 U. S. Health Care Systems (2)

Introduction for first-year students to the "big picture" of health care in this country. Several aspects of patient care, such as societal, financial, organizational, and governmental influences, are addressed. Focus on the pharmacist's role in various aspects of the health care system. Offered: Fall.

**PHRD 306 Physiological Chemistry (4)**

Exploration of the chemistry associated with physiological processes. Attention given to the various classes of biochemical compounds; amino acids, proteins, carbohydrates, enzymes, lipids, and nucleic acids. The concept of producing drugs by biotechnology is introduced, including, where appropriate, the action of drugs on the biological system. Offered: Fall.

**PHRD 307 Clinical Communications (2)**

Introduction to the fundamentals of patient counseling, including communication between the pharmacist and other health professionals. Offered: Spring.

**PHRD 308 and 309 Physiology and Pathophysiology I-II (6 each course)**

Two-course introduction to the concepts of molecular biology, physiology, immunology, and anatomy. The physiology of each organ system is followed by the pathophysiology, so that students are aware of normal and abnormal conditions. Prereq for PHRD 309: PHRD 308. Offered: Fall (308); Spring (309).

**PHRD 310 and 311 Pharmacy Dosage Forms Technology I-II (4 each course)**

Two-course introduction to the theory, technology, and techniques involved in the development, formulation, and preparation of pharmaceutical dosage forms. Includes one laboratory exercise each week demonstrating practical applications. Courses must be taken in sequence. Co-req for PHRD 310: PHRD 304. Prereqs for PHRD 311: PHRD 304 and PHRD 310. Offered: Fall (310); Spring (311).

**PHRD 312 Sterile Products (2)**

Introduction to aseptic technique and the production of sterile products, including hands-on experiences and the use of vertical and horizontal laminar-flow hoods. Prereq: PHRD 304. Offered: Spring.

**PHRD 313, 413, and 414 Infectious Disease I-II-III (3, 3, and 2, respectively)**

A three-course sequence in microbiology and human pathogens. Emphasis on the pathophysiology and treatment of infections of bacterial, fungal, and viral origin in humans. Co-req for PHRD 413: PHRD 403 and PHRD 405. Prereq for PHRD 413: PHRD 306, 308, 309, and 313. Prereq for PHRD 414: PHRD 413. Offered: Fall (413); Spring (313, 414).

**PHRD 400 Legal Principles of Pharmacy Practice (2)**

Presentation of the legal basis of pharmacy practice through examination of state and federal laws, regulations, and court decisions dealing with drug manufacturing and distribution, professional liability, and handling of medicinals, poisons, and controlled substances. Offered: Fall.

**PHRD 403 and 404 Pharmacology I-II (5 each course)**

Two-course introduction to the basic principles of pharmacology and the pharmacology of therapeutic agents. Emphasis on mechanisms of action, therapeutic indications, side effects, and toxicity. Prereqs for PHRD 403: PHRD 306 and PHRD 309. Prereqs for PHRD 404: PHRD 403. Offered: Fall (403); Spring (404).

**PHRD 405 and 406 Medicinal Chemistry I-II (4 each course)**

Two-course introduction to the chemistry of biologically active compounds of natural, synthetic, and semisynthetic origin. Prereqs for PHRD 405: PHRD 306, 308, 309, 310, and 311. Co-req for PHRD 406: PHRD 404. Prereq for PHRD 406: PHRD 405. Offered: Fall (405); Spring (406).

**PHRD 407 and 408 Therapeutic Drug Management I-II (4 each course)**

Two-course examination of pharmaceutical and physiological factors influencing the bio-availability of drugs from various dosage forms. Includes pharmacokinetic principles governing drug disposition and drug therapy, with emphasis on the application of pharmacokinetic principles and patient-specific data in optimizing therapeutic outcomes and overall patient management. Prereqs for PHRD 407: PHRD 303, 304, 306, 308, 309, 310, 311, 312, and 313. Prereq for PHRD 408: PHRD 407. Offered: Fall (407); Spring (408).

**Professional Electives\***

The doctor of pharmacy curriculum requires two (2) credits of electives to be completed during the third professional year of study. Didactic electives may be selected from the courses listed below, provided prerequisites are fulfilled. Courses taken prior to enrollment in the McWhorter School of Pharmacy cannot be counted toward elective requirements in the professional curriculum. Completion of the second professional year is a prerequisite of all electives.

Course Number/Name	Credit Hrs
PHRD 325 Contemporary Topics in Pharmacy	2
PHRD 422 Establishing & Developing a Professional Community Practice	2
PHRD 423 Radiopharmaceuticals	2
PHRD 426 Managed-Care Pharmacy	2
PHRD 430 Research	2
PHRD 431 Research	3
PHRD 528 Current Topics in Pediatric Pharmacotherapy	2
PHRD 529 Chemical Dependency	2

\* These electives may be offered in fall or spring, based on availability of the instructor and students' request of each course.

**Advanced Practice Experiences (APE)**

Enrollment in 600-level courses is based on availability of training sites and preceptors for each course. Successful completion of all coursework prior to the fourth professional year in the pharmacy curriculum is a prerequisite for all 600-level courses. Refer to APE Manual for additional information.

Course Number/Name	Credit Hrs
PHRD 605 Ambulatory Care	4
PHRD 606 Drug Information	4
PHRD 607 Adult Medicine I	4
PHRD 608 Adult Medicine II	4
PHRD 609 Association Management	4
PHRD 610 Adult Medicine III	4
PHRD 612 Community Pharmacy I	4
PHRD 614 Institutional Pharmacy I	4
PHRD 617 Institutional Pharmacy II	4
PHRD 618 Geriatric Pharmacy	4
PHRD 620 Pediatric Pharmacy	4
PHRD 622 Drug Information II	4
PHRD 624 Poison Information/Toxicology	4
PHRD 626 Metabolic Support	4
PHRD 628 Advanced Adult Medicine	4
PHRD 629 Medicine Subspecialty	4
PHRD 630 Ambulatory Care II	4
PHRD 631 Medical Critical Care	4
PHRD 632 Geriatric Pharmacy II	4
PHRD 633 Surgical Critical Care	4
PHRD 634 Pediatric Pharmacy II	4
PHRD 635 Cardiac Critical Care	4
PHRD 636 Pharmacokinetics	4
PHRD 637 Neurological Critical Care	4
PHRD 638 Clinical Pharmacy Research	4
PHRD 640 Managed-Care Pharmacy	4
PHRD 642 Advanced Community Pharmacy	4
PHRD 643 Advanced Community Pharmacy II	4
PHRD 644 Home Infusion Therapy	4
PHRD 646 Psychiatric Pharmacy	4
PHRD 648 Pharmacy Management	4
PHRD 650 Renal Medicine	4
PHRD 651 Neurology	4
PHRD 652 Hematology/Oncology	4
PHRD 653 Infectious Disease	4
PHRD 654 Cardiology	4
PHRD 656 Neonatology	4
PHRD 660 Pedagogics	4
PHRD 690 Nuclear Pharmacy	4

**PHRD 410 and 510 Patient Self-Care and Monitoring I-II (2 and 3, respectively)**

Two-course sequence that prepares pharmacists to effectively assist patients in making self-care decisions. Emphasis on therapeutic use and monitoring of non-prescription medications and dietary supplements. Selected prescription drug therapies included, as appropriate. Prereqs for PHRD 410: PHRD 400 and PHRD 403. Prereqs for PHRD 510: PHRD 404 and 410. Offered: Fall (510); Spring (410).

**PHRD 502 Advanced Pharmacy Practice (2)**

Review of basic concepts in pharmacy practice, including legal issues in drug distribution, storage, and record keeping. Includes pharmacy services in long-term care, plus how emerging roles in pharmacy practice (immunization provision, ambulatory infusion, DME service, pharmaceutical care, and disease management) are merged with traditional roles in pharmacy practice to present comprehensive pharmacy practice models. Offered: Fall.

**PHRD 521, 522, and 523 Therapeutics I-II-III (6, 4, and 6, respectively)**

Three-course sequence designed to develop applied knowledge of commonly occurring acute and chronic diseases with emphasis on therapeutic drug management. Prereqs for PHRD 521: PHRD 403 and PHRD 404. Offered: Fall (521); Spring (522, 523).

**PHRD 524 Fiscal Management (3)**

Review of fiscal concepts and theories encountered in all practice settings. Focus on making wise decisions about obtaining and using financial resources in order to increase the value of the organization and to optimize patient care. Prereqs: PHRD 305 and completion of second professional year of study. Offered: Fall.

**PHRD 525 Human Resources Management (3)**

Review of organizational structure and behavior in all pharmacy practice settings. Emphasis on the planning, implementing, and analyzing processes, as related to personnel. Prereq: Completion of second professional year of study. Offered: Spring.

**PHRD 527 Drug Literature Evaluation (3)**

Two-semester course designed to prepare pharmacists to evaluate biomedical literature and drug advertising, and to discuss pharmacoeconomics. Includes drug utilization evaluation and review procedures. Prereq: PHRD 303. Offered: Fall and Spring, in this sequence.

**PHRD 550 Physical Assessment (2)**

Hands-on, two-semester introduction to basic physical assessment with emphasis on monitoring for optimal drug therapy. Mini-lectures supported by labs that provide opportunities to practice skills. A grade of IP (in progress) will be issued at the end of the fall semester (IP grades do not negatively impact the GPA for that term). A final grade reflecting progress in the entire course will be issued at the end of the spring semester. Offered: Fall and Spring, in this sequence.

**PHRD 551 Ethics in Christianity and Health Care (2)**

Exploration of six character traits of ethical persons, addressing biblical and health care perspectives for each of those traits. Classroom lectures supplemented by small-group discussions that cover ethical issues and viable options. Course facilitated by faculty trained in pharmacy, nursing, and religion. Offered: Spring.

**PHRD 605 Ambulatory Care (4)**

Clinical APE designed to grant experience in providing clinical pharmacy services to ambulatory patients in a community pharmacy setting and/or selected outpatients of a general medicine/family practice ambulatory care service. Offered: Fall and Spring.

**PHRD 606 Drug Information (4)**

Clinical APE designed to enhance knowledge and skills in preparing for the pharmacist's role as a pharmacotherapy advisor and consultant. Offered: Fall and Spring.

**PHRD 607, 608, and 610 Adult Medicine I-II-III (4 each course)**

Three-course sequence of clinical APEs designed to enhance knowledge and skills used when providing clinical pharmacy services to adult populations. Prereqs for PHRD 610: PHRD 608. Offered: Fall and Spring.

**PHRD 609 Association Management (4)**

APE focusing on development of knowledge, skills, and attitudes necessary for professional association management. Includes experience in budgeting, publication coordination, membership activities, legislative activities, and meeting planning. Offered: Fall and Spring.

**PHRD 612 Community Pharmacy I (4)**

APE focusing on development of clinical and managerial skills in a community pharmacy/ambulatory care setting. Offered: Fall and Spring.

**PHRD 614 Institutional Pharmacy I (4)**

APE focusing on development of knowledge and skills in institutional pharmacy management and application of such systems in various practice environments. Offered: Fall and Spring.

**PHRD 615 and 616 Professional Seminar I-II (1 each course)**

Two-course sequence designed to provide students an opportunity to develop and defend a research proposal or to research a drug, therapeutic controversy, or management problem, and to make an oral presentation to fellow students and faculty. Taken during APEs in the fourth professional year. Offered: Fall and Spring.

**PHRD 617 Institutional Pharmacy II (4)**

APE designed to enhance knowledge and skills in institutional pharmacy management, plus application of such systems in various practice environments. Prereq: PHRD 614. Offered: Fall and Spring.

**PHRD 618 Geriatric Pharmacy (4)**

Clinical APE designed to develop knowledge and skills in serving the unique drug therapy needs of a geriatric population. Offered: Fall and Spring.

**PHRD 620 Pediatric Pharmacy (4)**

Clinical APE designed to develop knowledge and skills in serving the unique drug therapy needs of a pediatric population. Offered: Fall and Spring.

**PHRD 622 Drug Information II (4)**

APE designed to develop knowledge and skills in the operation of a Drug Information Center, formulary programs, DUE/DUR, managed care, Continuous Quality Improvement, and antibiotic management programs. Prereq: PHRD 606. Offered: Fall and Spring.

**PHRD 624 Poison Information/Toxicology (4)**

Clinical APE designed to enhance knowledge and skills in assessing and managing drug-induced toxicity and poisoning. Offered: Fall and Spring.

**PHRD 626 Metabolic Support (4)**

Clinical APE designed to enhance fundamental knowledge in the provision of metabolic (nutritional) support through parenteral and enteral routes. Offered: Fall and Spring.

**PHRD 628 Advanced Adult Medicine (4)**

Advanced clinical APE designed to enhance skills in the application of pharmaceutical knowledge to adult patients. Prereqs: PHRD 607, 608, and 610. Offered: Fall and Spring.

**PHRD 629 Medicine Subspecialty (4)**

APE designed to develop knowledge and skills used when serving the unique drug therapy needs of patients in a medicine subspecialty setting. Offered: Fall and Spring.

**PHRD 630 Ambulatory Care II (4)**

Advanced clinical APE designed to grant in-depth experience in the provision of clinical pharmacy services to ambulatory patients in a community pharmacy setting and/or selected in-patients of a general medicine/family practice ambulatory care service. Prereq: PHRD 605. Offered: Fall and Spring.

**PHRD 631 Medical Critical Care (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to critically ill adult populations. Offered: Fall and Spring.

**PHRD 632 Geriatric Pharmacy II (4)**

Advanced clinical APE designed to enhance skills in the application of pharmaceutical knowledge to geriatric patients. Prereq: PHRD 618. Offered: Fall and Spring.

**PHRD 633 Surgical Critical Care (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to critically ill adult populations. Offered: Fall and Spring.

**PHRD 634 Pediatric Pharmacy II (4)**

Advanced clinical APE designed to enhance skills in the application of pharmaceutical knowledge to pediatric patients. Prereq: PHRD 620. Offered: Fall and Spring.

**PHRD 635 Cardiac Critical Care (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to critically ill adult populations. Offered: Fall and Spring.

**PHRD 636 Pharmacokinetics (4)**

APE designed to enhance knowledge and skills in the direct application of pharmacokinetic principles to patient drug therapy management. Offered: Fall and Spring.

**PHRD 637 Neurological Critical Care (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to critically ill adult populations. Offered: Fall and Spring.

**PHRD 638 Clinical Pharmacy Research (4)**

APE designed to enhance knowledge and skills in planning and conducting research. Introduction to research design, protocol development, regulatory requirements, data collection, and data analysis. Offered: Fall and Spring.

**PHRD 640 Managed-Care Pharmacy (4)**

APE designed to enhance knowledge and skills in managed-care pharmacy while assisting in the development of higher-order thinking skills through real time analysis and application in a managed-care environment. Enrollment may be limited by availability of training sites and preceptors. Offered: Fall and Spring.

**PHRD 642 Advanced Community Pharmacy I (4)**

Clinical APE designed to grant experience in providing clinical pharmacy services to patients in a community pharmacy. Offered: Fall and Spring.

**PHRD 643 Advanced Community Pharmacy II (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to patients in a community pharmacy. Prereq: PHRD 642.

**PHRD 644 Home Infusion Therapy (4)**

APE designed to provide experience with intravenous preparations including chemotherapy, antimicrobials, and total parenteral nutrition. Students provide drug information, patient counseling, and in some cases, visit patients in the home. Offered: Fall and Spring.

**PHRD 646 Psychiatric Pharmacy (4)**

APE designed to enhance knowledge and skills in the delivery of pharmaceutical care in the psychiatric setting, and to assist in the development of higher-order thinking skills. Enrollment may be limited by availability of training sites and preceptors. Offered: Fall and Spring.

**PHRD 648 Pharmacy Management (4)**

APE designed to enhance knowledge and skills in pharmacy management including such topics as financial planning and analysis, budgeting, pricing, capital investment, inventory control, organizational design, personnel development and administration, and legal aspects of pharmacy management. Enrollment may be limited by availability of training sites and qualified preceptors. Offered: Fall and Spring.

**PHRD 650 Renal Medicine (4)**

APE designed to provide experience and enhance skills in the provision of pharmaceutical care to adult patients with renal disease. Offered: Fall and Spring.

**PHRD 651 Neurology (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to patients with neurological diseases. Offered: Fall and Spring.

**PHRD 652 Hematology and Oncology (4)**

APE that exposes students to the care of patients with malignant disorders, allowing students to gain experience in optimizing the pharmacotherapy of such patients. Offered: Fall and Spring.

**PHRD 653 Infectious Disease (4)**

APE designed to enhance knowledge and skills in providing clinical pharmacy services to patients with infectious diseases. Offered: Fall and Spring.

**PHRD 654 Cardiology (4)**

Clinical APE designed to advance knowledge in caring for critically ill adult patients with particular emphasis in cardiology. Offered: Fall and Spring.

**PHRD 656 Neonatology (4)**

APE designed to provide basic skills and knowledge needed to provide pharmaceutical care to the neonate. Offered: Fall and Spring.

**PHRD 660 Pedagogics (4)**

APE designed to develop knowledge and skills in various aspects of teaching. Includes opportunities for exposure to and participation in didactic teaching, including active-learning techniques and experiential teaching. Offered: Fall and Spring.

**PHRD 690 Nuclear Pharmacy (4)**

APE designed to expand knowledge and skills in the area of radiopharmaceutics. Offered: Fall and Spring.

**PHARMACY ELECTIVES****PHRD 325 Contemporary Topics in Pharmacy (2)**

Discussion of contemporary topics of interest in the pharmacy profession. Multiple or single topics may be considered. Offered: Fall or Spring.

**PHRD 422 Establishing and Developing a Professional Community Practice (2)**

Project-oriented course focusing on the establishment and development of a professional community practice. Consideration given to the pros and cons of choosing an existing practice versus establishing a new practice. Includes review of records establishment and maintenance, cost-to-dispense determination, marketing aspects, and use of other areas of health care to complement a prescription practice. Prereq: PHRD 524. Offered: Spring.

**PHRD 423 Radiopharmaceuticals (2)**

Introduction to radiopharmaceuticals and the practice of nuclear pharmacy. Consideration given to the properties, methods of measurement and detection, preparation, storage, administration, and diagnostic and therapeutic applications of radioactive pharmaceuticals. Prereq: PHRD 405. Offered: Fall or Spring.

**PHRD 426 Managed-Care Pharmacy (2)**

Exploration of the fundamental knowledge and skills needed in the delivery of pharmaceutical care in a managed-health care environment, primarily serving ambulatory patients. Emphasis on drug benefit management from a fiscal and clinical perspective. Prereq: Completion of second professional year of study or permission of course coordinator. Offered: Fall or Spring.

**PHRD 430 Research (2)**

Application of literature and laboratory techniques, or other methods of scientific investigation, to pharmaceutical problems. Students may choose to study and investigate a suitable problem with any department in the School of Pharmacy. Prereqs: Consent of instructor directing the research and a professional GPA of at least 2.50. Offered: Fall or Spring.

**PHRD 431 Research (3)**

See PHRD 430 for description. Offered: Fall or Spring.

**PHRD 528 Current Topics in Pediatric Pharmacotherapy (2)**

Overview of pediatric pharmacotherapy, with focus on treatment and therapeutic monitoring of common pediatric diseases. Prereq: Completion of second professional year of study or permission of course coordinator. Offered: Fall.

**PHRD 529 Chemical Dependency (2)**

Study of the field of addiction. Through participation in class-directed activities, students examine multiple aspects of the disease of chemical dependency with emphasis on the impact of addiction on the health care professions. Offered: Fall.

**McWhorter School of Pharmacy Calendar for Academic Year 2008-2009**

<b>Fall Semester 2008</b>	<b>Spring Semester 2009</b>
<p><b>May 28</b> Payment due date for P4 students  <b>June 2</b> APEs begin for P4 students  <b>July 4</b> Independence Day Holiday; no classes meet  <b>August 18-22</b> Faculty in residence for the academic session  <b>August 20</b> Payment due date for P1-P3 students  <b>August 21-22</b> Orientation for P1 students  <b>August 25</b> Classes begin for P1-P3 students  <b>August 26</b> University Convocation  <b>August 29</b> Last day for P1-P3 students to add or drop a course(s) <b>without FINANCIAL penalty</b>  <b>September 1</b> Labor Day Holiday; no classes meet for P1-P3 students  <b>September 18</b> McWhorter School of Pharmacy Picnic  <b>October 3</b> McWhorter School of Pharmacy White Coat Ceremony  <b>October 10</b> Last day for P1-P3 students to withdraw from a course <b>without ACADEMIC penalty</b>  <b>October 20-21</b> Fall Break for P1-P3 students; no classes meet  <b>Oct 22 - Nov 21</b> Registration for Spring Semester  <b>November 13</b> Last day for P1-P3 students to <b>completely withdraw</b> from ALL courses in semester <b>without ACADEMIC penalty</b>  <b>November 26-28</b> Thanksgiving Holidays, no classes meet  <b>December 5</b> Classes end  <b>December 8-11</b> Final Examinations  <b>December 13</b> Commencement</p>	<p><b>January 5</b> Payment due date for all pharmacy students  <b>January 5</b> Classes, APE and EPE begin for P1-P4 students  <b>January 19</b> Martin Luther King, Jr. Holiday, no classes meet for P1-P3 students  <b>January 23</b> EPEs end for P2 students  <b>January 26</b> Didactic classes begin for P2 students  <b>January 27</b> University Convocation  <b>January 30</b> Last day for P2-P3 students to add or drop a course(s) <b>without FINANCIAL penalty</b>  <b>February 23</b> Last day for P1 students to withdraw from a course <b>without ACADEMIC penalty</b>  <b>March 13</b> Last day for P2 and P3 students to withdraw from a course <b>without ACADEMIC penalty</b>  <b>March 16-20</b> Spring Break for P1-P3 students; no classes meet  <b>March 27</b> Last day for P1 students to <b>completely withdraw</b> from ALL courses in semester <b>without ACADEMIC penalty</b>  <b>April 1-24</b> Registration for Summer and Fall Semesters  <b>April 10</b> Classes end for P1 students  <b>April 13</b> Easter Monday Holiday for P1-P3 students; no classes meet  <b>April 14-17</b> Final examinations for P1 students  <b>April 17</b> Last day for P2 and P3 students to <b>completely withdraw</b> from ALL courses in semester <b>without ACADEMIC penalty</b>  <b>April 20</b> EPEs and PHRD 302 begin for P1 students  <b>May 8</b> Classes end for P2 and P3 students  <b>May 11-14</b> Final Examinations for P2 and P3 students  <b>May 12</b> EPE ends for P1 students  <b>May 13-14</b> PHRD 302 meets for P1 students  <b>May 15</b> McWhorter School of Pharmacy Graduation</p>

**Legend:**

APE = Advanced Practice Experiences  
 EPE = Early Practice Experiences

P1 = 1st-year Pharmacy student  
 P2 = 2nd-year Pharmacy student

P3 = 3rd-year Pharmacy student  
 P4 = 4th-year Pharmacy student

**Note:**

The McWhorter School of Pharmacy Calendar for Academic Year 2009-2010 was unavailable at press time. Please check the following Web site for an updated calendar: <http://www.samford.edu/groups/sturec/acadcalendar.html>.

MCWHORTER SCHOOL OF PHARMACY TUITION AND FEES FOR ACADEMIC YEAR 2008-2009				
Description of Expense	Student Classification	Payment Regulations	Expense	Payment Due Date (1)
<b>Tuition</b>				
Less than 12 credits	Part-time Pharmacy Students	Deposit nonrefundable See Refund Policies	\$1,007/credit	\$450 deposit upon acceptance and remainder on or before e-bill payment due date
12 to 21 credits	Full-time Pharmacy Students	Deposit nonrefundable See Refund Policies	\$12,400/semester	\$450 deposit upon acceptance and remainder on or before e-bill payment due date
More than 21 credits	Full-time Pharmacy Students	Deposit nonrefundable See Refund Policies	\$1,007/credit	On or before e-bill payment due date
Joint Degree	Joint Degree Pharmacy Students	See Refund Policies	By Classification	On or before e-bill payment due date
<b>Residence Hall Fees, Double Occupancy*</b>				
Beeson Woods, West Campus	Pharmacy Students starting June	See Refund Policies	\$2,550/Fall semester	On or before e-bill payment due date
Evergreen Hall	Pharmacy Students starting June	See Refund Policies	\$2,735/Fall semester	On or before e-bill payment due date
Ramsey Hall	Pharmacy Students starting June	See Refund Policies	\$2,675/Fall semester	On or before e-bill payment due date
Beeson Woods, West Campus	Pharmacy Students starting Aug	See Refund Policies	\$1,685/Fall semester	On or before e-bill payment due date
Evergreen Hall	Pharmacy Students starting Aug	See Refund Policies	\$1,595/Fall semester	On or before e-bill payment due date
Ramsey Hall	Pharmacy Students starting Aug	See Refund Policies	\$1,535/Fall semester	On or before e-bill payment due date
Student Apartments	Pharmacy Students starting Aug	See Refund Policies	\$1,280/Fall semester	On or before e-bill payment due date
Beeson Woods, West Campus	Pharmacy Students Spring sem	See Refund Policies	\$1,855/Spring semester	On or before e-bill payment due date
Evergreen Hall	Pharmacy Students Spring sem	See Refund Policies	\$1,765/Spring semester	On or before e-bill payment due date
Ramsey Hall	Pharmacy Students Spring sem	See Refund Policies	\$1,710/Spring semester	On or before e-bill payment due date
Student Apartments	Pharmacy Students Spring sem	See Refund Policies	\$1,455/Spring semester	On or before e-bill payment due date
<b>Board</b>				
19 meals/week + \$130 declining balance	Pharmacy Students starting June	See Refund Policies	\$2,588/Fall semester	On or before e-bill payment due date
12 meals/week + \$130 declining balance	Pharmacy Students starting June	See Refund Policies	\$2,238/Fall semester	On or before e-bill payment due date
19 meals/week + \$130 declining balance	Pharmacy Students starting Aug	See Refund Policies	\$1,612/Fall semester	On or before e-bill payment due date
12 meals/week + \$130 declining balance	Pharmacy Students starting Aug	See Refund Policies	\$1,446/Fall semester	On or before e-bill payment due date
7 meals/week + \$130 declining balance	Pharmacy Students starting Aug	See Refund Policies	\$1,024/Fall semester	On or before e-bill payment due date
19 meals/week + \$130 declining balance	Pharmacy Students Spring sem	See Refund Policies	\$1,882/Spring semester	On or before e-bill payment due date
12 meals/week + \$130 declining balance	Pharmacy Students Spring sem	See Refund Policies	\$1,690/Spring semester	On or before e-bill payment due date
7 meals/week + \$130 declining balance	Pharmacy Students Spring sem	See Refund Policies	\$1,207/Spring semester	On or before e-bill payment due date
<b>London Programs at Daniel House, Samford's London Study Centre, Fees (subject to change)</b>				
Pharmacy Externship (12 weeks)	Pharmacy Students	See Refund Policies	TBD	Due at registration
Pharmacy Externship (8 weeks)	Pharmacy Students	See Refund Policies	TBD	Due at registration
Pharmacy Participation Fee	Pharmacy Students	See Refund Policies	\$300	Due at registration
<b>Fees</b>				
Application Fee for School of Pharmacy Admission	All Pharmacy Students	Nonrefundable	\$50/application	At time of application submission
Books and Supplies	All Pharmacy Students		\$1,600 (estimate)	Cash/check/credit card at time of purchase
Lab Supplies	All Pharmacy Students		\$305/year	
Safety Screening Fee	All Pharmacy Students		\$80/year	

\* Double rooms assigned for single occupancy are 200% of the rate for double-occupancy rooms.  
NOTE: See p. 32 for a list of General Miscellaneous Fees that apply to ALL students.

SPECIAL NOTE: Fees are subject to change without notice. See the Bursar's Office Web site for the latest tuition and fee info: [www.samford.edu/admin/bursar/fees.html](http://www.samford.edu/admin/bursar/fees.html)

(1) Charges incurred after the e-bill has been generated for the semester/term are due on or before the e-bill due date (see Payment Schedule on p. 32 for e-bill generation and payment due dates). Charges incurred during the drop/add period are due when incurred. Classes may be canceled for non-payment.