PREPHARMACY CURRICULUM

The “prepharmacy curriculum” is just a list of courses that are required for admission to pharmacy school. It is NOT an academic major, a minor, or an emphasis area.

WHAT SHOULD I MAJOR IN?

Many students are admitted to a School of Pharmacy after completing the series of required courses and electives, which typically takes up to 3 years. However, students often take these courses as well as courses in a major in order to complete a four year non-pharmacy baccalaureate degree at Southern Miss before entering pharmacy school. Even if you plan to apply to pharmacy school after taking only the courses required for admission, you need to declare an academic major at USM. Most students major in a science field such as Biological Sciences or the Biochemistry or Pharmacy emphasis of Chemistry. You can actually choose any major as long as you can fit the prerequisite coursework for pharmacy schools in your schedule.

Progress toward a Baccalaureate Degree
Course work toward a baccalaureate degree at Southern Miss must be planned so the student meets all the requirements for the prepharmacy curriculum, a major, a minor if appropriate, and the University General Education Curriculum. At Southern Miss, a minimum of 124 hours is needed for most baccalaureate degrees, with 45 of these hours from courses at the 300-level or above.

PHARMACY SCHOOLS

Visit the American Association of Colleges of Pharmacy (AACP) student center web page for more information about pharmacy schools and their locations: https://www.aacp.org/resources/student-center

Pharmacy Programs in Mississippi and States Adjoining Mississippi
Students should consult the specific professional pharmacy programs at the university(s) to which they plan to apply in order to determine their entrance requirements, application deadlines, and professional program requirements. A brief summary of pharmacy programs at nearby institutions is given below.

Mississippi

Ole Miss School of Pharmacy - http://pharmacy.olemiss.edu
Entrance into their professional program requires at least three years of specific prepharmacy undergraduate courses (approximately 90 credit hours). After admission to their professional pharmacy program it requires a total of four years of additional courses to obtain a Pharm.D. degree. Upon completion of the first year of the professional program students receive a BPSD degree and must apply to continue in the Pharm.D. program. The first two years of the professional program are located in Oxford, MS. The last two years of the program are at the University of Mississippi Medical Center in Jackson, MS and affiliated sites.

William Carey University School of Pharmacy at the Tradition Campus on the Mississippi Gulf Coast, [http://www.wmcarey.edu/school/pharmacy](http://www.wmcarey.edu/school/pharmacy). It requires a minimum of 68 credit hours of specific prerequisite courses. Its program is an approximately three year program in contrast to most schools who have four year pharmacy doctorate programs. William Carey University School of Pharmacy has submitted an application to the Accreditation Council for Pharmacy Education (ACPE) and has received pre-accreditation status. This means that the school can enroll pharmacy students and they have started their first class the summer of 2018. The school is currently accepting student applications for its next class that starts in the summer of 2019.

**Alabama**

Auburn University, Harrison School of Pharmacy, [http://pharmacy.auburn.edu](http://pharmacy.auburn.edu)

Entrance into their professional program requires a minimum of 90 credit hours of specific prepharmacy undergraduate courses. After admission to their professional pharmacy program, a total of four years of additional courses in the program are required to obtain a Pharm.D. degree. The program is located in Auburn, AL at Auburn University with an additional program site in Mobile, AL, on the campus of the University of South Alabama.

Samford University, McWhorter School of Pharmacy, [http://www.samford.edu/pharmacy/](http://www.samford.edu/pharmacy/)

Entrance into their professional program requires a minimum of 64-67 credit hours of specific prepharmacy undergraduate courses. After admission to their professional pharmacy program a total of four years of additional courses in the program are required to obtain a Pharm.D. degree. Located in Birmingham, AL

**Louisiana**

Xavier University College of Pharmacy – [http://www.xula.edu/cop/](http://www.xula.edu/cop/)

Entrance to the professional program requires at least 66 credit hours of specific prepharmacy undergraduate courses. After admission to their professional program to qualify for the degree of Doctor of Pharmacy (Pharm.D.) a student must complete their four-year professional curriculum. Located in New Orleans, LA.

University of Louisiana at Monroe School of Pharmacy – [http://www.ulm.edu/pharmacy/](http://www.ulm.edu/pharmacy/)

Entrance into their professional program requires at least 77 credit hours of specific prepharmacy undergraduate courses. After admission to ULM Professional Pharmacy Program, four additional years of courses in the program are required to obtain a Doctor of Pharmacy degree (Pharm D). Located in Monroe, LA.

**Requirements for Applicants**

The following list of Courses meets only the minimal requirements for admission to the School of Pharmacy at the University of Mississippi. Of all the pharmacy schools in the surrounding
area the University of Mississippi (Ole Miss) prerequisites for the Pharm.D program are the most specific course wise and consequently challenging to fit into a prepharmacy curriculum.

Link to Preprofessional courses required by Ole Miss before entering Professional Pharmacy Program: [http://pharmacy.olemiss.edu/prepharmacy/index/prepharmcurriculum/](http://pharmacy.olemiss.edu/prepharmacy/index/prepharmcurriculum/)

Link to Ole Miss School of Pharmacy “Transfer Course Equivalency form” listing the equivalent prepharmacy courses from Mississippi universities that are required for admission to their pharmacy program: [https://pharmacy.olemiss.edu/prepharmacy/wp-content/uploads/sites/13/2016/08/MSTransferEqiuvAugust2016.pdf](https://pharmacy.olemiss.edu/prepharmacy/wp-content/uploads/sites/13/2016/08/MSTransferEqiuvAugust2016.pdf)

Students must complete the fourth year of the *Bachelor of Science in Pharmaceutical Sciences (BSPS) degree program at Ole Miss* in order to be accepted into the Ole Miss *Doctor of Pharmacy* program. Students are admitted to the BSPS program after completion of three or more years of required prepharmacy courses at Southern Miss (or at other two-year and four-year colleges/universities).

Admission preference is given to applicants who are Mississippi residents and United States citizens and to non-Mississippi United States citizens who complete all of the required prepharmacy courses at the University of Mississippi. However, academically exceptional non-Mississippi residents, who completed their pre-pharmacy requirements at other institutions, may apply.

*S Students must consult the specific admission requirements and application deadlines for the school(s) to which they plan to apply, including Ole Miss. Courses listed below first lists the Ole Miss requirement from their pharmacy website and then followed by courses from USM that they accept to meet their requirements:*

- English composition (6 hours) – ENG 101 and 102
- general chemistry (8 hours) – CHE 106 and 107 with labs
- biological sciences (8 hours) – BSC 110 and 111 with labs
- speech (3 hours) – CMS 111
- calculus (3 hours) – MAT 167
- organic chemistry (8 hours) – CHE 255 and 256 with labs
- microeconomics (3 hours) – ECO 202
- physics (8 hours) – PHY 111 and 112 with labs or PHY 201 and 202 with labs
- statistics (3 hours) – PSY 360 or MAT 115 or 320 or DPH 440
- genetics (4 hours) – BSC 370 or 475
- biochemistry (3 hours) (emphasizing metabolism) – CHE 422 – note it has CHE 421 prereq
- medical microbiology / pathogenesis of infectious diseases (3 hours) – BSC 381 or 481
- human physiology (3 hours) – BSC 451
- bioethics / biomedical ethics (3 hours)
  - NOTE: **Health Care Ethics (PHI 452)** is taught sporadically on the Hattiesburg campus of Southern Miss and the Gulf Coast campus in Long Beach. Students must check the Course Schedule Guide each year or plan to take a bioethics course at another university.
- cell / molecular biology (4 hours) – BSC 360
- immunology (3 hours) – BSC 486
- social sciences (6 hours)
• humanities and fine arts (12 hours)
The 18 hours of social sciences plus humanities and fine arts (aesthetic values at USM) must include a minimum of 3 hours in these two general areas. Performance credits are acceptable at Ole Miss. Correspondence courses are accepted at Ole Miss as elective credit (humanities, fine arts, social science, behavior science, etc.
• Ole Miss pharmacy prefers that applicants have a minimum scaled score of 395 on the Pharmacy College Admission Test (PCAT) taken during the current testing cycle preceding the application deadline as well as a writing score of at least 3.0.

**SUGGESTED COURSE SEQUENCE & STRATEGIES FOR SUCCESS**
The *suggested course sequence* below is merely a guideline. Students must consult the USM Undergraduate Bulletin, the USM Class Schedule Guide for each semester, and their academic advisor. During the Sophomore year, students should develop a more detailed plan for the Junior and Senior years because many upper level courses in all majors are offered in specific semesters (Fall or Spring only) and/or on a rotating two-year cycle.

**Link to Ole Miss School of Pharmacy suggested course sequence:**
[http://pharmacy.olemiss.edu/prepharmacy/prepharmcurriculum/](http://pharmacy.olemiss.edu/prepharmacy/prepharmcurriculum/)

**YEAR 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>BSC 110&amp;L OR BSC 111&amp;L a 4 h</td>
<td>BSC 111&amp;L OR BSC 110&amp;L a 4 h</td>
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<tr>
<td>CHE 106&amp;L</td>
<td>CHE 107&amp;L</td>
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<tr>
<td>MAT 101 b 3 h</td>
<td>MAT 103 b 3 h</td>
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<td>ENG 101 c 3 h</td>
<td>ENG 102</td>
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<tr>
<td>CMS 111 3 h</td>
<td>One required elective d 3 h</td>
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a, The order in which students take the introductory Biological Sciences (BSC) courses does not matter; BSC 110/L covers molecular and cellular topics whereas BSC 111/L covers ecology and organisms.

b, Placement in mathematics (MAT) courses depends on the student’s ACT subtest score. Calculus is required for some majors in the College of Arts and Sciences and the Ole Miss pharmacy program requires MAT 167, a calculus course.

c Placement in English Composition courses depends on the student’s ACT English subtest score.

- **ACT English subtest score 16 or below:** ENG 99E (Expanded Composition Studio) and ENG 100E (Composition I expanded)
- **ACT English subtest score 17-19:** ENG 100E (Composition I expanded)
- **ACT English subtest score 20 or above:** ENG 101 (Composition I)

d, “Required electives” must include 6 hours of social/behavioral sciences and 9 hours of fine arts at USM.

**NOTE:** if a student is also pursuing a baccalaureate degree from Southern Miss, he/she must take:

- one fine arts (aesthetic values) course (select from ART 130, DAN 130, MUS 165, THE 100)
• two Humanities courses (select from HIS 101, HIS 102, PHI 151, REL 131); one Humanities must be a HIS course; plus ENG 203 which is also a humanities required elective
• two Social and Behavioral Sciences courses: select one from (ANT 101, GHY 101, SOC 101) and one from (ECO 101, PS 101, PSY 110). SOC 101 and PSY 110 are commonly selected.

Strategy for Success
• Students should focus on doing well in their studies, particularly the required science and math courses.
• Students should become involved with extracurricular activities, including meaningful community service learning, volunteer activities, and leadership positions that will demonstrate effective interactions with diverse people and effective time management skills.
• Students could start getting some hands-on exposure to pharmacy.
• Students may join AED (Alpha Epsilon Delta), the national Health Preprofessional Honor Society, as associate members at any time even if they do not fulfill the requirements for full membership (must be enrolled at Southern Miss for a minimum of three semesters and meet specific course and GPA requirements). Full members are inducted during the Spring semester. Information and links to AED Full and Associate Member applications are available on the Southern Miss Preprofessional website.

YEAR 2
Fall                          Spring
CHE 255&L                     CHE 256&L        4 h
PHY 111&L                     PHY 112&L        4 h
MAT 167                       PSY 360   c          3 h
ECO 202                       BSC 380/L or BSC 381/L  f 3 h
One required elective d      One required elective d  3 h

, PSY 360 is recommended, depending on the student’s major; another upper level statistics course may be recommended or required for a specific major.
  BSC 380/L counts toward a B.S. in some Biological Sciences emphasis areas while BSC 381/L does not.

Strategy for Success
• Students continue to focus on doing well in their studies.
• Students remain involved with meaningful community service learning, volunteer activities, and leadership positions.
• Students could participate in hands-on exposure to pharmacy.
• Students are typically inducted into AED, the national Health Preprofessional Honor Society, in the Spring semester of the Sophomore year, but may be inducted in Junior or Senior year (must be enrolled at Southern Miss for a minimum of three semesters and meet specific course and GPA requirements).
YEAR 3
This schedule for year 3 assumes that a student will apply in year 3 to enter a pharmacy program at the end of year 3. If, instead, a student plans to get a BS degree first from USM before going to pharmacy school some of these courses can be moved from year 3 to year 4 making a more balanced schedule in years 3 and 4.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>PHI 452 (^g)</td>
<td>CHE 422 (^i)</td>
</tr>
<tr>
<td>BSC 451 (^h)</td>
<td>BSC 360 or BSC 476</td>
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<tr>
<td>BSC 481 (^h)</td>
<td>BSC 370 or BSC 475</td>
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<tr>
<td>BSC 486/L (^h)</td>
<td>One required elective (^d)</td>
</tr>
<tr>
<td>CHE 421(^i)</td>
<td>1-2 other courses as needed (^j)</td>
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\(^g\), PHI 452 (Health Care Ethics) is taught sporadically at USM; students must check the Course Schedule Guide for the Hattiesburg and Gulf Coast campuses each year and take it whenever/wherever it is offered, or they must plan to take a bioethics course at another university.

\(^h\), BSC 451 (Human Physiology) and BSC 481 (Pathogenic Microbiology) are typically taught in Fall but check the Course Schedule Guide and be prepared to take it another semester. BSC 486/L (Immunology) is typically taught in the spring. If the student previously took BSC 381/L then BSC 481 is not required and an elective can be taken in its place.

\(^i\) Students can use CHE 422 to satisfy the biochemistry requirement, the prerequisite to CHE 422 is CHE 421.

\(^j\), Students may take BSC 399 (MCAT Preparation) if they would like to review Biology, Chemistry, and Physics in a formal class or they should prepare on their own before attempting the Pharmacy College Admission Test (PCAT) for the first time. Students may take the PCAT after completing the required prepharmacy courses. BSC 399 is offered in the Spring semester; pre-requisites include ENG 101, 102; BSC 110/L, 111/L; CHE 106/L, 107/L, 255/L, 256/L; PHY 111/L, 112/L; [MAT 101& MAT 103 OR one Calculus course] and one upper level BSC or CHE course; minimum overall GPA 3.4.

**Strategy for Success**
- Students continue to focus on doing well in their studies.
- Students remain involved with meaningful community service learning, volunteer activities, and leadership positions.
- Students continue to participate in hands-on experiences related to any aspect of pharmacy.
- Apply to pharmacy school when you have completed the required courses (see below for application process).

YEAR 4 (If pursuing a baccalaureate at Southern Miss)

<table>
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<tr>
<th>Fall</th>
<th>Spring</th>
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<tr>
<td>Classes to fulfill major, etc. 15-18 h</td>
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**THE APPLICATION PROCESS**

The **application process may begin** in the Spring semester of the third year if pursuing a baccalaureate at Southern Miss. Each pharmacy school has their own deadlines so consult the program(s) to which you plan to apply. The deadline for their Early Decision Program is early in September. The application process should begin months earlier for those transferring to Ole Miss after only three years at Southern Miss. Deadline for completing the application through PharmCAS is by March 1 for regular admission for the following August. All materials must be received by March 1 if applying to Ole Miss. It is best to apply well before the deadline. See the application information for Ole Miss pharmacy regular entry process at: [http://pharmacy.olemiss.edu/professional/index/applicationpro/readmissionspro/](http://pharmacy.olemiss.edu/professional/index/applicationpro/readmissionspro/)

Most pharmacy schools use the centralized application service PharmCAS to create a standard application that can be sent to multiple pharmacy schools. As part of the service you will enter from your official transcript(s) each of your courses for any college or university you attended including courses which you repeated. They calculate your GPA based on all courses attempted in which you received a letter or numerical grade. Link to PharmCAS: [http://www.pharmcas.org/](http://www.pharmcas.org/)

Students should learn about the **Pharmacy College Admission Test** (PCAT), which is taken during the twelve months preceding the application deadline, about the online **Pharmacy College Application Service** (PharmCAS), and about getting letters of evaluation from faculty. Link to PCAT: [http://pcatweb.info/](http://pcatweb.info/)

Students are **strongly encouraged to take** an **online practice PCAT** before taking the PCAT that they will use on their application: [http://tpc-testing.com/pcatopt/](http://tpc-testing.com/pcatopt/)

**THE INTERVIEW**

Students are advised to practice their interview skills BEFORE attending their first interview.

- You may use the online **Perfect Interview™** resource: [http://www.perfectinterview.com/usm/](http://www.perfectinterview.com/usm/)
- Or, sign up for mock interviews through Career Services by calling 601-266-4153: [http://www.usm.edu/career-services/about-us](http://www.usm.edu/career-services/about-us)
- **Dress professionally** and **act professionally** at your interview.

**FOR MORE INFORMATION ABOUT A CAREER IN HEALTH CARE, CONTACT THE PREPROFESSIONAL OFFICE**

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