**Preoptometry Curriculum**

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

**What Should I Major In?**

Students wishing to study optometry must complete at least three or more years in a preprofessional program, for example at Southern Miss. Some optometry schools strongly prefer that students have a baccalaureate degree; other schools require the baccalaureate degree prior to matriculation. Close to 100% of applicants admitted to optometry school this last year had their B.S. or B.A. degree by the time they entered optometry school.

Students without a baccalaureate degree need to declare an academic major at USM. Many students choose a major in one of the sciences (Biological Sciences, Chemistry/Biochemistry, Physics) but other majors are acceptable including the humanities, social sciences, or business. Students who major in either Biological Sciences or the Biochemistry emphasis of Chemistry meet almost all optometry school course requirements in those majors. Students should select the major in which they feel the most comfortable and in which they would like to work if they are not accepted into optometry school.

*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 preprofessional 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.

**Optometry Schools**

Visit the Association of Schools and Colleges of Optometry web pages for more information about optometry schools. Link to main page: [http://www.opted.org](http://www.opted.org) and then click on the link “Students/Future Students”. There are 23 accredited Schools or Colleges of Optometry in the United States.

**Requirements for Applicants**

The prerequisites for admission to optometry programs are somewhat different, depending on the school, so students must consult the specific admission requirements and application deadlines for the school(s) to which they plan to apply.

There is no optometry school in Mississippi so Mississippi residents must apply to optometry schools in other states. Optometry programs at the University of Alabama at Birmingham, the Southern College of Optometry in Memphis, Tennessee, the University of Houston, and the University of Incarnate...
Word in San Antonio admit residents of Mississippi (and other states) to professional study. These programs actively recruit qualified students from our school, USM. Many of the schools have a certain number of contract seats for in-state tuition for Mississippi residents as part of the Southern Regional Education Board (SREB) contract seat program. However, preference is sometimes given to residents of the respective states.

- UAB: http://www.uab.edu/optometry
- SCO: https://www.sco.edu/
- UH: http://www.opt.uh.edu/
- UIW: http://www.uiw.edu/optometry/

University of Alabama at Birmingham
Exceptional students may apply with a minimum of 90 semester hours. Those who will have a bachelor’s degree by the time of matriculation are given strong preferential consideration. All prerequisite courses must be completed prior to the summer term of the matriculation year. The deadline for applications is March 1 but it is wise to apply much earlier than the deadline.

Required courses (grade of C or better)
- two semesters of biology with laboratory
- one microbiology course
- two semesters of general chemistry with laboratory
- one semester of organic chemistry with laboratory
- one semester of biochemistry
  NOTE: at Southern Miss the prerequisite for CHE 420 (Principles of Biochemistry) is one semester of organic chemistry, but the prerequisites for CHE 421 (Biochemistry I) are two semesters of organic chemistry
- two semesters of physics with laboratory
- one calculus course
- one statistics course
- two semesters of English composition
- one psychology course (a statistics course in psychology does not count for this requirement)
- two semesters of social and behavioral sciences (any combination of sociology, economics, anthropology, history, political science, or additional psychology)

Southern College of Optometry (Memphis, TN)
Exceptional students may apply with 90 semester hours; however, strong preference is given to students with a baccalaureate degree. Deadline for applications is March 1 of each year.

Required courses
- two semesters of general biology with laboratory
- one microbiology course with laboratory
- two semesters of general chemistry with laboratory
- one semester of organic chemistry with laboratory
- one biochemistry course (or one molecular biology course)
  NOTE: at Southern Miss the prerequisite for CHE 420 (Principles of Biochemistry) is one semester of organic chemistry, but the prerequisites for CHE 421 (Biochemistry I) are two semesters of organic chemistry
- two semesters of general physics with laboratory
- one calculus course
- one statistics course
- two semesters of English composition and/or literature
- one general psychology course
- two semesters of social sciences (any combination of sociology, psychology, political science, history, economics, anthropology, geography, religion, or philosophy)

University of Houston/College of Optometry
Applicants must have a baccalaureate degree prior to matriculation, including the following required courses. Please check with their program directly to make sure of the deadline for application.

- two semesters of biological sciences with laboratory (must be courses for majors)
- two semesters of general chemistry with laboratory (must be courses for majors)
- two semesters of general physics with laboratory (have an optics section dedicated to the study of wave theory and the propagation of light)
- one semester of calculus; one or more courses in algebra, trigonometry, pre-calculus, or analytical geometry is recommended, but not required.
- 8 hours of advanced biology; anatomy and advanced physiology are recommended.
  Acceptance of other advanced biology courses to satisfy prerequisite requirements is at the discretion of the admissions committee. It is recommended that applicants receive prior approval from the Dean of Students of the College of Optometry for applicable courses. Courses such as genetics, molecular biology, cell biology, neuroscience, anatomy, physiology, advanced human physiology, mammalian physiology, immunology, and endocrinology will be acceptable.
- one semester of organic chemistry with laboratory
- one semester of biochemistry
- NOTE: at Southern Miss the prerequisite for CHE 420 (Principles of Biochemistry) is one semester of organic chemistry, but the prerequisites for CHE 421 (Biochemistry I) are two semesters of organic chemistry
- one semester of microbiology with laboratory
- one semester of psychology
- one semester of statistics

University of Incarnate Word, Rosenberg School of Optometry in San Antonio, TX.
Applicants must have a minimum of 90 semester hours and minimum GPA of 3.0. Strong preference is given to those with a baccalaureate degree. It has similar prerequisites to other Optometry schools and these can be found at the following website:
http://www.uiw.edu/optometry/admissions/prerequisites.html

Suggested Course Sequence & Strategies for Success

The suggested course sequence below is merely a guideline to complete the courses required for application to most optometry programs in a timely manner. Courses to fulfill the major must be worked into the student’s schedule. Students must consult the USM Undergraduate Bulletin, the USM Class Schedule Guide for each semester, and their academic advisor. During the last semester of 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.

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</td>
<td>BSC 111&amp;L OR BSC 110&amp;L</td>
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<tr>
<td>CHE 106&amp;L</td>
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<td>MAT 101</td>
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<td>ENG 101</td>
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<td>One other course</td>
<td>3 h</td>
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\(a\), The order that 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 mathematics subtest score.

\(c\), 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 1)

d, “Other” courses include those in the General Education Curriculum (which would include the required psychology, social and behavioral sciences) and courses in the major and/or minor. PSY 360 (Statistics for the Behavioral Sciences) is recommended, depending on student’s major; another statistics course may be recommended or required by a specific major.

e, Students are strongly encouraged to complete the prerequisites for the Hatten Externship (BSC 392) during the first year (see below).

Strategy for Success
• Students should focus on doing well in their academic 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 should maintain a record of the dates and total hours spent performing such activities. This will be needed when it comes time to apply to optometry school.
• Students should start getting some hands-on exposure to optometry. Preoptometry students may take the Hatten Preprofessional Externship (BSC 392) if they would like to shadow an optometrist or ophthalmologist; students are strongly encouraged to complete the prerequisites for the Externship during the first year. The Externship course is offered each Fall semester, so students must fulfill the prerequisites by the end of the preceding Summer semester. Students may participate in the Externship twice; participation in the Externship as Sophomores and Juniors is recommended. Externship prerequisites are ENG 101, 102; BSC 110/L, 111/L; CHE 106/L, 107/L; [MAT 101, 103 OR one Calculus course]. Minimum GPA of 3.2 for USM GPA, degree GPA, and BCPM GPA.
• 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

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<tr>
<td>CHE 255&amp;L</td>
<td>4 h</td>
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<tr>
<td>PHY 111&amp;L</td>
<td>4 h</td>
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<tr>
<td>[ or PHY 201&amp;L</td>
<td>5 h ]</td>
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<tr>
<td>BSC 380/L</td>
<td>4 h</td>
</tr>
<tr>
<td>1-2 other classes d, e, f</td>
<td>3-7 h</td>
</tr>
</tbody>
</table>

f, Students may take BSC 399 (MCAT Preparation) if they would like to review Biology, Chemistry, and Physics in a formal class, or they need to prepare on their own before attempting the Optometry Admission Test (OAT) for the first time. Students may take the OAT after completing one year of college courses but most students take after the second (or third) year of courses.

BSC 399 is offered in the Spring semester. Prerequisites 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

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one upper level BSC or CHE course. Minimum GPA of 3.4 for USM GPA, degree GPA, and BCPM GPA.

**Strategy for Success**
- Students continue to focus on doing well in their studies, particularly the required science and math courses.
- Students remain involved with meaningful community service learning, volunteer activities, and leadership positions.
- Students continue to participate in hands on exposure to optometry. Students may participate in the Hatten Externship (BSC 392), which is offered each Fall.
- 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).
- Students may take the OAT after completing the second year of preprofessional study.

**YEAR 3**

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<th>Fall</th>
<th>Spring</th>
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<tr>
<td>Classes to fulfill major, minor</td>
<td>Classes to fulfill major, minor</td>
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<td>15-18 h</td>
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† Students may take BSC 399 (MCAT Preparation) during the Spring semester of the Junior year if they would like to review Biology, Chemistry, and Physics in a formal class. Otherwise students need to prepare on their own before attempting the OAT for the first time.

BSC 399 is offered in the Spring semester. Prerequisites 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 GPA of 3.4 for USM GPA, degree GPA, and BCPM GPA.

**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 optometry.

**YEAR 4**

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

The application process may begin after the student has completed the prerequisite courses (typically after the third year of preprofessional study). Look at the application process of the specific school(s) for which you plan to apply. They can differ in deadlines and process. In addition, you may need to meet specific functional or technical guidelines regarding physical, mental, and social abilities.

Students should learn about the Optometry Admission Test (OAT), about the online Optometry Centralized Application Service (OptomCAS) application process, and about getting letters of evaluation from faculty. Link to OptomCAS: [http://www.optomcas.org/](http://www.optomcas.org/)

The OAT is a requirement for admission to all colleges of optometry and is typically taken after the second or third year of preprofessional study. This is usually in the spring or summer prior to your application. The test has four parts, 1. Survey of Natural Sciences (measures knowledge of Biology, General Chemistry, and Organic Chemistry), 2. Reading Comprehension, 3. Physics, and 4. Quantitative
Reasoning. Link to OAT by going to http://www.opted.org then click on OPTOMETRY ADMISSION TEST link at the top of the webpage.

Students are strongly encouraged to take an online practice OAT before taking the OAT that they will use on their application. The OAT website has a sample test. There are a number of other websites that have practice questions or practice tests; use Google to search for “practice OAT questions”.

Many Optometry schools use the Optometry Centralized Application Service (OptomCAS), which is a centralized application service (http://www.optomcas.org/), and many schools also require a specific supplemental application, which is described on their respective websites.

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/
- Or, sign up for mock interviews through Career Services by calling 601-266-4153:
  http://www.usm.edu/career-services/about-us
- Dress professionally and act professionally at your interview.

FOR MORE INFORMATION ABOUT A CAREER IN HEALTHCARE,
CONTACT THE PREPROFESSIONAL OFFICE

Preprofessional Office
Dr. Jeffrey Evans, Preprofessional Advisor
jeffrey.evans@usm.edu
Phone: 601-266-4315
Office Location: Bobby Chain Technology Center (TEC 100)

College of Arts and Sciences
118 College Dr., #5004
Hattiesburg, MS 39406-0001