

Pre-Health Professional Curricula

Pre-health professional curricula are offered in pre-dentistry, pre-medicine, pre-optometry, pre-physical therapy, pre-physician assistant, pre-pharmacy and pre-veterinary medicine. Advisors are available to guide the students concerning admissions requirements to the professional schools. The department in which students major will advise them where applicable. Completion of these curricula does not assure admission to a professional school. Competition for admission to professional schools is keen; the number of qualified applicants exceeds the number of places available.

Pre-Dentistry and Pre-Medicine

These programs are designed to prepare students for dental and medical schools and lead to a bachelor of science in one of several majors offered through the college. The requirements are very exacting and demand high scholastic competence and performance.

Most American dental and medical schools recommend that applicants have at least two semesters of freshman biology, general chemistry, organic chemistry, and physics with labs; (2) breadth in the educational experience; and (3) in-depth experience in a single discipline. Auburn University students complete these recommendations by enrolling in a core of courses shown in the curriculum model. Each student also declares a major. Students should confer with the College of Sciences and Mathematics (COSAM) pre-health advisors for specific course requirements since these can vary from school to school. Students may choose to major in a curriculum in another college or school, but they should meet with the COSAM Director of Pre-Health Programs as freshmen for assistance in becoming competitive applicants.

In the junior year, students should attend the mandatory meetings concerning the application process that are conducted by the COSAM Chairman of the Pre-Health Professions Advisory Committee (PPAC) in January. Also, students in pre-dentistry or pre-medicine should take the Dental Admission Test (DAT) or the Medical College Admission Test (MCAT) at least a year before the date of entry to professional school and submit applications to the professional schools of their choice at that time.

Pre-Optometry

This program leads to a bachelor of science and prepares students for the rigorous demands of American optometry schools.

Students must select a major and should confer with the COSAM pre-health advisors for specific course requirements since these can vary from school to school. Students may also choose to major in a curriculum in another college or school, but they should work with the COSAM Director of Pre-Health Programs as freshmen for assistance in becoming competitive applicants.

Pre-optometry students should review the websites of the optometry schools of their choice during the freshman year to determine any special admission requirements of those schools. The prerequisite courses for most U.S. optometry schools are listed in the curriculum model, either as required courses or as electives. In the junior year, students should attend the mandatory meetings concerning the application process that are conducted by the COSAM Chairman of PPAC in January. Students should take the Optometry Admission Test (OAT) and complete an official application for admission to the schools of their choice about a year in advance of the expected date of enrollment.

Pre-Physical Therapy

This program prepares students applying to schools of physical therapy and leads to a bachelor's degree in one of the majors offered in the College of Sciences and Mathematics. Students should confer with their academic advisors for specific course requirements since these can vary from school to school. Students may also choose to major in a curriculum in another college or school, but they should meet with the COSAM Director of Pre-Health Programs as freshmen for information about becoming competitive applicants. Students should review the websites of the schools of their choice during the freshman year to determine any special admission requirements of those schools. Students should take the Graduate Record Examinations (GRE) and complete an official application for admission to the schools of their choice about a year in advance of the expected date of enrollment.

Pre-Pharmacy

This program meets the requirements for admission to the Auburn University Harrison School of Pharmacy, which is fully accredited by the American Council on Pharmaceutical Education. Complete information about the professional curriculum in pharmacy may be found in the Harrison School of Pharmacy section of this *Bulletin*.

To be considered for admission, the applicant must complete the course requirements listed in the curriculum model and meet other admissions criteria set by the Harrison School of Pharmacy.

Although not required, students may want to complete an undergraduate degree before entering pharmacy school since the majority of students admitted have a degree. Any major may be acceptable as long as the pre-pharmacy requirements are completed. The College of Sciences and Mathematics offers a major in biomedical sciences that is an excellent choice for students interested in this option. Students should confer with the COSAM pre-health advisors for specific course requirements.

Pre-Physician Assistant

This program is designed to prepare students for enrollment in physician assistant programs and leads to a bachelor of science in one of several majors offered through the college. The academic requirements are very demanding and high scholastic competence and performance are expected. Auburn University students complete these recommendations by enrolling in a core of courses shown in the curriculum model. Each student also declares a major. Students should confer with the COSAM pre-health advisors for specific course requirements since these can vary from school to school. Students may choose to major in a curriculum in another college or school, but they should meet with the COSAM Director of Pre-Health Programs as freshmen for assistance in becoming competitive applicants and applying.

Students in the pre-physician assistant program should take the GRE at least a year before the date of entry to professional school and submit an application to the schools of their choice at that time.

Pre-Veterinary Medicine

Students in the Pre-Veterinary Medicine (PVET) curriculum must select a major by the end of their sophomore year. Students in Sciences and Mathematics typically select microbiology (MCMB, PVET) or organismal biology (IBIO, PVET) as majors. Pre-Veterinary options in the College of Agriculture include animal sciences (ANDS, PVET) and poultry science (POUL, PVET). A pre-vet option in wildlife (WILD, PVET) sciences also exists in the School of Forestry and Wildlife Sciences. The minimum requirements for admission to the College of Veterinary Medicine at Auburn University are incorporated into the curriculum models for all of these majors.

It is possible to gain admission to the College of Veterinary Medicine by completing only the minimum requirements listed. However, it is preferable to select a major and earn a baccalaureate degree. If a student is admitted to the College of Veterinary Medicine prior to completion of the full four years, he or she may obtain a BS degree by successfully completing the first three years of some of the Pre-Veterinary curricula and the first year of veterinary school. Students should consult their advisors regarding which curricula offer this option. Application for admission to the College of Veterinary Medicine must be submitted to the dean of that college. A minimum grade-point average of 2.5 is required for application; D grades in required courses are unacceptable. All minimum requirements, including courses repeated due to time limitations, must be completed by the end of the spring term preceding the date of admission, and all advanced required courses in physical and biological sciences (organic chemistry and physics) must have been completed within six calendar years prior to the anticipated entrance date. Competition for admission to the professional schools is keen with the number of qualified applicants exceeding the number of places available. For additional information, see College of Veterinary Medicine section and the Pre-Veterinary Medicine curricula in the College of Agriculture, COSAM, and the School of Forestry and Wildlife Sciences.

Programs

- Pre- Medicine, Pre-Dental, Pre-Optometry. Majors in:
 - Biomedical Sciences (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_pre-med/)
 - BA Chemistry (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/chemistryandbiochemistry/bacurriculuminchemistry_major_pre-meddenopt/)
 - Genetics (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/genetics_major_pre-med/)
 - Microbiology (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/microbialcellularmolecularbiology-microbiology_major_pre-med/)
 - Physics (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/physics/physics_major_pre-med/)
 - Organismal Biology (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/ibio_major_premed/) (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/ibio_major_premed/)
- Pre-Pharmacy. Major in:
 - Biomedical Sciences (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_pre-phar/)

- Pre-Physical Therapy and Pre-Physician Assistant (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/prephysicaltherapy_major/). Majors in:
 - Biomedical Sciences (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_pre-pphsppat/)
 - Microbiology (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/microbialcellularmolecularbiology-microbiology_major_pre-pphsppat/)
 - Physics (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/physics/physics_major_pre-pphsppat/)
 - Organismal Biology (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/ibio_major_prephsppat/)
- Pre-Veterinary Medicine (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/preveterinarymedicine_major/). Majors in:
 - Microbiology (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/microbiology_preveterinarymedicine_major/)
 - Organismal Biology (http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/orgbio_preveterinarymedicine_major/)

Courses

SCMH 1010 CONCEPTS OF SCIENCE (4) LEC. 3. LAB. 2. Interdisciplinary course which presents major scientific concepts in physical and biological sciences. After taking SCMH 1010, students can complete core science requirement series by taking BIOL 1010, CHEM 1010, GEOL 1100, PHYS 1000, or PHYS 1150. Science Core. May count either SCMH 1010 or SCHM 1013 or SCHM 1017.

SCMH 1017 HONORS CONCEPTS OF SCIENCE (4) LEC. 3. LAB. 2. Pr. Honors College. Interdisciplinary course for Honors students which presents major scientific concepts in physical and biological sciences. After taking SCMH 1017, students can complete core science requirement series by taking BIOL 1010, CHEM 1010, GEOL 1100, GEOL 1107, PHYS 1000, or PHYS 1150. Science core. Credit will not be given for both SCMH 1017 and SCMH 1010.

SCMH 1100 COSAM ORIENTATION (1) LEC. 1. Introduction to the College of Sciences and Mathematics and its resources, exploration of STEM careers, orientation to campus resources and facilities, and assistance with academics and transition to Auburn.

SCMH 1890 PRE-HEALTH PROFESSIONS ORIENTATION (1) LEC. 1. SU. Orientation and guidance for freshmen and transfer students planning to seek admission to health professions schools and programs such as dentistry, medicine, optometry, pharmacy, physician assistant, and physical therapy.

SCMH 2150 OPS: MANAGEMENT OF BUSINESS PROCESSES (2) LEC. 2. Fundamental concepts, techniques and tools of business processes.

SCMH 3810 PRE-PHYSICAL THERAPY PRACTICUM (1) PRA. 2. SU. Departmental approval. Direct observation of physical therapists at an approved facility in the Auburn-Opelika area.

SCMH 3890 PRE-MEDICAL PRECEPTORSHIP (1) LAB. 2. SU. Departmental approval. Direct observation and interaction with physicians at East Medical Center and in individual medical offices.

SCMH 4920 SCIENCES AND MATHEMATICS INTERNSHIP (3) LEC. 3. SU. Practical on-the-job training in some area related to Sciences and Mathematics. Course may be repeated for a maximum of 6 credit hours.

SCMH 5010 CLINICAL APPLICATIONS I (3) LEC. 2. A study of the clinical/personal issues facing primary care physicians in the rural community. Must be enrolled in the Rural Medicine Program.

SCMH 5020 CLINICAL APPLICATIONS II (3) LEC. 2, CLN/LEC. 1. Pr. SCMH 5010. A continuation of SCMH 5010.

SCMH 5940 GLOBAL STUDY/TRAVEL IN SCIENCES AND MATHEMATICS (1-12) AAB. and departmental approval. Application required. Students international study travel on topics relevant to Sciences and Mathematics. Course may be repeated for a maximum of 12 credit hours.