

# Pre-Health Professional Curricula

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Pre-health professional curricula are offered in interdisciplinary health sciences, pre-anesthesiologist assistant, pre-dentistry, pre-medicine, pre-optometry, pre-pharmacy, pre-physical therapy, pre-physician assistant, and pre-veterinary medicine. Advisors are available to guide 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-Anesthesiologist Assistant

The Auburn University/Edward Via College of Osteopathic Medicine-Bluefield Rocovich Early Admission Program (REAP) is a unique opportunity for Auburn University students interested in a career as an Anesthesiologist Assistant (CAA). The Rocovich EAP provides early admission to VCOM-Bluefield's Master of Health Science in Anesthesia (MHSA) Program for highly competitive Auburn students each year who have met the program requirements. Candidates selected for admission into the program are notified in the spring of their junior undergraduate year.

All interested pre-medical/pre-health sciences students should confer with the College of Sciences and Mathematics (COSAM) pre-health advisors for specific course requirements and other details about the program. COSAM offers a major in Biomedical Sciences that is an excellent choice for students interested in this program. These students can obtain a Bachelor of Science in Biomedical Sciences after successfully completing the first year of the MHSA program.

## Pre-Dentistry, Pre-Medicine, Pre-Optometry

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

Auburn University students complete these requirements 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. The prerequisite courses for most U.S. dental, medical and optometry schools are listed in the curriculum model, either as required courses or as electives. Students may choose to major in a curriculum in another college or school, but they should meet with the COSAM Pre-Health Counseling Specialist as freshmen and/or sophomores 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-Professional Advisory Committee (PPAC) in October. Also, students in pre-dentistry, pre-medicine or pre-optometry should take the Dental Admission Test (DAT), the Medical College Admission Test (MCAT) or the Optometry Admission Test (OAT) 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-Pharmacy

This program meets the requirements for admission to the Auburn University Harrison College 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 College 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 College of Pharmacy.

Although not required, students may want to complete an undergraduate degree before entering pharmacy school. 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.

Early admission into Harrison College of Pharmacy is possible through the Early Assurance Program. Please visit Harrison College of Pharmacy's website for more information about that program. If a student is admitted to Harrison College of Pharmacy prior to the completion of the full four years, he or she may obtain a Bachelor of Science in Biomedical Sciences by successfully completing the first three years of the Biomedical Sciences/Pre-Pharmacy curriculum and the first three semesters of pharmacy school. Students should consult their advisors about this option.

## 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 Pre-Health Counseling Specialist as freshmen and/or sophomores 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-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 requirements 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 Pre-Health Counseling Specialist as freshmen and/or sophomores for assistance in becoming competitive applicants and applying.

Students in the pre-physician assistant program should take the GRE or PA-CAT 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 COSAM typically select microbiology (VMCB), organismal biology (VIBO) or genetics (VGEN) as majors. Pre-Veterinary options in the College of Agriculture include animal sciences (ANPV) and poultry science (POPV), A pre-vet option in wildlife (WLPV) sciences also exists in the College of Forestry, Wildlife and Environment. The minimum requirements for admission to the College of Veterinary Medicine at Auburn University are incorporated into the curriculum models for all 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 Medicine curricula and the first year of veterinary medical school. Students should consult their advisors regarding which curricula offer this option. 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. 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 of this *Bulletin* and the Pre-Veterinary Medicine curricula in the College of Agriculture, COSAM, and the College of Forestry, Wildlife and Environment.

## Programs

- Pre-Anesthesiologist Assistant
  - Biomedical Sciences ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences\\_major\\_anesth/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_anesth/))
- Interdisciplinary Health Sciences
  - Biomedical Sciences ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences\\_major\\_InterHealth/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_InterHealth/))
- Pre-Medicine, Pre-Dental, Pre-Optometry. Majors in:
  - Biomedical Sciences ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences\\_major\\_pre-med/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_pre-med/))
  - BA Chemistry ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/chemistryandbiochemistry/bacurriculuminchemistry\\_major\\_pre-meddenopt/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/chemistryandbiochemistry/bacurriculuminchemistry_major_pre-meddenopt/))
  - Genetics ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/genetics\\_major\\_pre-med/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/genetics_major_pre-med/))
  - Microbiology ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/microbialcellularmolecularbiology-microbiology\\_major\\_pre-med/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/microbialcellularmolecularbiology-microbiology_major_pre-med/))
  - Physics ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/physics/physics\\_major\\_pre-med/](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/)) ([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/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_pre-phar/))
- Pre-Physical Therapy and Pre-Physician Assistant Majors in:
  - Biomedical Sciences — Interdisciplinary Health Sciences ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences\\_major\\_InterHealth/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/biomedicalsciences_major_InterHealth/))
  - Microbiology ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/microbialcellularmoleculاربiology-microbiology\\_major\\_pre-pphsppat/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/microbialcellularmoleculاربiology-microbiology_major_pre-pphsppat/))
  - Physics ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/physics/physics\\_major\\_pre-pphsppat/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/physics/physics_major_pre-pphsppat/))
  - Organismal Biology ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/ibio\\_major\\_prephsppat/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/biologicalsciences/ibio_major_prephsppat/))
- Pre-Veterinary Medicine Majors in:
  - Genetics ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/genetics\\_major\\_pre-vet/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/genetics_major_pre-vet/))
  - Microbiology ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/microbiology\\_preveterinarymedicine\\_major/](http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/microbiology_preveterinarymedicine_major/))
  - Organismal Biology ([http://bulletin.auburn.edu/undergraduate/collegeofsciencesandmathematics/prehealthprofessionalcurricula/orgbio\\_preveterinarymedicine\\_major/](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 tailored for non-freshmen and transfer students planning to seek admission into health professions schools and programs such as dentistry, medicine, optometry, pharmacy, physician assistant, and physical therapy.

**SCMH 1897 HONORS PRE-HEALTH PROFESSIONS ORIENTATION (1)** LEC. 1. SU. Pr. Honors College. Orientation and guidance tailored for non-freshmen and transfer students planning to seek admission into health professions schools and programs such as dentistry, medicine, optometry, pharmacy, physician assistant, and physical therapy.

**SCMH 1950 COSAM MAJOR AND CAREER EXPLORATION (1)** LEC. 1. SU. Introduction to majors offered by the College of Sciences and Mathematics, motivation and skills for academic success, departmental resources and facilities, and exploration of careers in Sciences and Mathematics.

**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 (1-4)** DSL. 8-16. 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 4980 SCIENCES AND MATHEMATICS UNDERGRADUATE RESEARCH (1-5)** IND/RES. Departmental approval. Directed research in an area of specialty within Sciences and Mathematics and interdisciplinary fields. 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. 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.