PRE DENTISTRY, PRE MEDICINE, PRE PHYSICIAN ASSISTANT, AND PRE VETERINARY MEDICINE

Health Careers Advisory Committee
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Travis Then, Career Services Center

Students should declare the appropriate Pre-professional interest track, through the "Forms" tab on the Registrar’s Office main page. Students with these declared interest tracks will be assigned to a member of this committee to assist in planning their program of study as their secondary advisor. They will also be automatically enrolled in the Pre-professional Programs group in Canvas, which will provide resources and communication about upcoming events, opportunities, and deadlines.

The admission requirements vary slightly among the various schools and programs. For specific information students should review the websites of the medical, dental, and veterinary medical schools to which they are interested in applying. Other sources of information are current websites of the medical, dental, and veterinary medical schools to which they are interested in applying. Other sources of information are current websites.

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Most professional training programs require a core of courses ("prerequisites") that must be completed before admission. They can be successfully incorporated into almost any major. The choice of major does not significantly affect the student’s probability of admission to a given professional graduate school. Students should give consideration to any major that they find interesting and in which they excel. Nearly all professional schools require completion of a bachelor’s degree.

The achievement of outstanding academic credentials should not be accomplished at the expense of sacrificing extracurricular activities. Professional programs prefer students who have actively pursued their interests, especially in the areas of leadership, service to underserved populations, and clinical or health-related experiences. (Physician assistant and veterinary medicine schools require specified hours of clinical care experiences for competitive application.)

In addition to course work, virtually all professional schools require some form of standardized test prior to consideration of a student’s admission application. These tests are usually taken in the spring before application is made in early summer. Medical schools require the Medical College Admission Test (MCAT), dental schools the Dental Admission Test (DAT), and veterinary medicine schools and physician assistant schools the Graduate Record Examination (GRE) Aptitude Test.

Applications to professional schools are made a year before expected matriculation, usually between June and October. This means that the course work included on the standardized entrance test must be completed by the end of the junior year of college in order to move straight from college to professional schools the following August without a “gap” year. With this being said, students should be aware that completing requirements to apply after the senior year would allow them to spread out the required courses, pursue minors or second majors, or study abroad, which may increase the success of students in admissions to professional schools. In the application year, early application to professional schools (by August 1) is strongly recommended, as interviews and acceptances go first to the earliest applicants. (Physician assistant schools start in either August or January, so their application cycle begins in April.)

Professional school applications are made directly to Centralized Application Services for each type of graduate program. The American Medical College Application Service (AMCAS) is the agent for allopathic medical schools, the American Association of Dental Schools Application Service (AADSAS) is the agent for many dental schools, the American Association of Colleges of Osteopathic Medicine (AACOMAS) is the agent for osteopathic medical schools, the Central Application Service for Physician Assistants (CASPA) is the agent for physician assistant schools, and the Veterinary Medical College Application Service (VMCAS) is the agent for veterinary medical schools. Application information is available from those services directly and through the Canvas Pre-professional Programs group resources. Medical, dental, PA and vet schools not subscribing to the centralized application service must be contacted individually.

Students interested in other post college health careers such as Optometry, Podiatric Medicine, Chiropractic Medicine, Genetic Counseling, etc. are encouraged to declare a Pre-medicine interest track as well, to have access to the resources and Health Careers Advisory Committee for assistance in planning their programs of study.

Pre Medicine Recommended Courses
Allopathic and osteopathic medical schools generally require the categories below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tr>
<td>BIO 111</td>
<td>Principles of Biology I</td>
<td>4</td>
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<tr>
<td>BIO 111L</td>
<td>Principles of Biology I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>Principles of Biology II</td>
<td>4</td>
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<tr>
<td>BIO 112L</td>
<td>Principles of Biology II Laboratory</td>
<td>4</td>
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<tr>
<td>BIO 277</td>
<td>Human Physiology</td>
<td>4</td>
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<tr>
<td>BIO 277L</td>
<td>Human Physiology Laboratory</td>
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General Chemistry with Laboratory

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<tr>
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<tbody>
<tr>
<td>CHE 111</td>
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<td>CHE 112</td>
<td>General Chemistry I Laboratory</td>
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CHE 114  General Chemistry II
CHE 115  General Chemistry II Laboratory

Organic Chemistry with Laboratory
CHE 351  Organic Chemistry I
CHE 352  Organic Chemistry II
CHE 354  Organic Chemistry Laboratory

Biochemistry
Select one option of the following:
Option A
CHE 420  Chemical Principles of Biochemistry
Option B
CHE 556  Biochemistry I
CHE 557  Biochemistry II
Option C
BIO 435  Biochemistry: Metabolic Regulation in Health and Disease

Physics with Laboratory
Select one option of the following:
Option A
PHY 211  General Physics I
PHY 211L  General Physics Lab I
PHY 212  General Physics II
PHY 212L  General Physics Lab II
Option B
PHY 291  General Physics I with Calculus
PHY 291L  General Physics I with Calculus Lab
PHY 292  General Physics II with Calculus
PHY 292L  General Physics II with Calculus Lab

Mathematics
A few schools require mathematics through calculus, while nearly all require statistics.
MAT 191  Calculus I
STA 108  Elementary Introduction to Probability and Statistics
or STA 271  Fundamental Concepts of Statistics

College Writing
ENG 101  College Writing I
ENG 102  College Writing II

Behavioral Sciences
PSY 121  General Psychology
SOC 101  Introduction to Sociology

Other courses that may be required include those detailed below.

Pre Dentistry Recommended Courses
Dental school preparatory course requirements are usually much like those for medical school; however, they may also require anatomy in addition to the classes listed above.

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<tr>
<td>BIO 271</td>
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<tr>
<td>BIO 271L</td>
<td>Human Anatomy Laboratory</td>
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Pre Physician Assistant Recommended Courses
Physician assistant programs are more variable in requirements than medical schools. While still requiring the same Biology and Chemistry courses as medical and dental schools, they typically do not require Physics courses, but add courses in Anatomy, Microbiology, Genetics, and Medical terminology.

Pre Veterinary Medicine Recommended Courses
Veterinary school course requirements are considerably more extensive than those for medical or dental schools. In addition to specifying all of the above courses in mathematics, chemistry, and biology, these programs typically require or recommend more courses in animal science, general microbiology, animal nutrition, and possibly some business courses. Several hundred hours of work experience with animals or in a veterinarian’s practice is required. Students interested in veterinary school should make contact with the school and with the advisory committee at an early stage of their undergraduate careers, to discuss how to meet these requirements.

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<tr>
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<td>BIO 472</td>
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