

liberal education is usually specified. Any major will do; choose a major according to your interests. Some aptitude and university training in science and English are essential in medicine. The minimum requirements in these subjects specified by most medical schools can be satisfied by specific courses in biology (BIOSC 1A-B), chemistry (CHEM 1A-B, 128A-B, 129A and often 129B), physics (PHYS 2A-B), and two semesters of English. A course in biochemistry is often required or strongly recommended. Courses in physiology, genetics, molecular biology, immunology, and cell biology are also recommended and may be helpful in preparation for the Medical College Admission Test (MCAT). Also, some facility with mathematical concepts is usually expected; one semester of calculus and one semester of statistics will meet the requirements for most medical schools. Because of competition for admission to medical schools, a grade point average above 3.5 is highly desirable. The MCAT is required before students can be accepted into medical school. It is recommended that the MCAT be taken and application for medical school be made about one year before anticipated matriculation into medical school.

All students who are entering the program are advised to contact a premedical adviser prior to registration. Each student is assigned to a member of the premedical advisory committee to plan a program of courses and discuss preparatory procedures for application to medical school. For more, please see [www.csufresno.edu/csm/programs/preprofadvising.html](http://www.csufresno.edu/csm/programs/preprofadvising.html) and contact

**Dr. Lenore Yousef**  
Premedical Advisory Committee  
California State University, Fresno  
2555 E. San Ramon, SB 314  
Fresno, CA 93740-8034  
559.278.5264; FAX: 559.278.3963  
e-mail: [lenore\\_yousef@csufresno.edu](mailto:lenore_yousef@csufresno.edu).

**Preoptometry.** California State University, Fresno provides courses for the completion of preprofessional requirements of an optometry program. Most professional schools require junior standing and coursework that includes two years of biology, one year of chemistry, mathematics, physics and English, and one semester of psychology and statistics with above-average scholarship. The Optometry Admission Testing Program (OAT) exam is required before application can be made to optometry school. Application should be made one year in advance of anticipated enrollment.

For further information, see optometry school catalogs and consult the preoptometry adviser.

**Dr. Vanilai Katkanant**  
Physics Department  
559.278.2118; FAX: 559.278.7741  
e-mail: [vanilai@csufresno.edu](mailto:vanilai@csufresno.edu)

**Prepharmacy.** California State University, Fresno provides prepharmacy coursework to prepare a student for admission into a four-year pharmacy program. All new and transfer students should indicate an interest in prepharmacy on application, admittance, and registration papers. Admission to most pharmacy schools now requires a *B+* average or better in a minimum of 60 semester units, including one year each of general chemistry, organic chemistry, physics, calculus, biology, and English composition. Certain schools may have additional specified requirements. Although some students gain admission to pharmacy school after two or three years of undergraduate study, most students are not accepted until they have completed four years of college. Students without a high cumulative grade point average should plan to graduate with a bachelor's degree before entering a pharmacy program. Majors that are most compatible with required classes are in the sciences, particularly biology and chemistry. However, as long as the required preprofessional courses are completed, any major is acceptable. For further information, see the prepharmacy adviser and consult pharmacy school Web sites ([www.aacp.org](http://www.aacp.org)).

**Dr. Shirley Kovacs**  
Biology Department  
559.278.2001; FAX: 559.278.3963  
e-mail: [shirley\\_kovacs@csufresno.edu](mailto:shirley_kovacs@csufresno.edu)

**Dr. Howard Ono**  
Chemistry Department  
559.278.2394; FAX: 559.278.4402  
e-mail: [howard\\_ono@csufresno.edu](mailto:howard_ono@csufresno.edu)

**Preveterinary.** Students preparing for the veterinary profession can satisfy their preveterinary curriculum requirements at California State University, Fresno. A minimum of 60 semester units of required courses (see next column) must be taken prior to acceptance into a veterinary school program. Most students combine the required science courses with General Education and major requirements as they work toward a bachelor's degree in either animal sciences or biology. In addition to performance in required classes, prospective veterinary students are evaluated by

their performance on the general portion of the Graduate Records Examination which is to be taken within five years of veterinary school application.

All students interested in veterinary medicine are encouraged to take ASCI 68, Preveterinary Orientation (taught each fall in the Department of Animal Sciences and Agricultural Education), for updated information regarding admission requirements and policies. Courses recommended by the Department of Animal Sciences and Agricultural Education for its majors preparing for veterinary school include ASCI 65, 135, 155, 165; BIOC 1A, 1B, 140A-B; CHEM 1A, 1B, 128A-B, 129A, 150; MICRO 20; PHYAN 151; and PHYS 2A, 2B. Preveterinary students completing a degree in biology should take the following courses recommended by the Department of Biology: BIOC 1A, 1B; CHEM 1A, 1B; PHYS 2A, 2B; CHEM 128A-B, CHEM 129A-B; CHEM 150; BIOC 140A-B; and PHYAN 151 or 163. In addition, a statistics class, two writing classes, and a speech class are required by most veterinary schools.

The College of Agricultural Sciences and Technology is equipped to provide valuable experience with large animals through the labs and projects at the university farm laboratory. Admission to veterinary school in California requires a minimum of about 4.5 week equivalents (180 hours) of relevant veterinary experience in activities that specifically give the applicant an appreciation and understanding of the profession of veterinary medicine. For further information, contact the chair of the Animal Sciences Department, the campus veterinarian, and/or the adviser in the Biology Department.

**Dr. Michael W. Thomas**  
Animal Sciences and Agricultural Education Department  
559.278.4288; FAX: 559.278.4101  
e-mail: [michael\\_thomas@csufresno.edu](mailto:michael_thomas@csufresno.edu)

**Dr. Paul Crosbie**  
Biology Department  
559.278.2074; FAX: 559.278.3963  
e-mail: [pcrosbie@csufresno.edu](mailto:pcrosbie@csufresno.edu)