

# Pre-Medical/Pre-Allied Health

**M**edicine, dentistry, veterinary medicine, and pharmacy are among the many fields students can prepare for at CSUB. The University offers course work to meet the requirements of medical and other professional schools while providing a liberal arts education.

**Other career possibilities include** physical therapy, clinical laboratory sciences, optometry, and physician's assistant.

Although professional schools do not always require a bachelor's degree and application may be made after three years of university work, they generally encourage basic preparation and a broad general education before specialization. Competition for admission is severe, and students are advised to plan a program of study leading to a baccalaureate degree should admission be denied. Most students obtain a science degree, but other majors are also accepted provided required courses have been taken. Typically, mathematics and computers (one year), physics (one year), chemistry (two years), and biology (two years) are required.

Small class size and individual attention are additional benefits Pre-Medical/Pre-Allied Health students enjoy while attending CSUB.

Interested students are encouraged to contact Dr. Roy LaFever, Associate Professor of Chemistry, 661-664-2336, or Dr. Sharon Roberts, Professor of Biology, 661-664-2220 for further information.



## **Recommended Courses**

This program is designed to provide the basic course requirements to meet entrance requirements for post-baccalaureate study in medicine, dentistry, veterinary medicine, pharmacology, chiropractic, and physical therapy.

### **1. A minimum of 55 units in Biology:**

- a. The following courses:  
BIOL 210 Animal Biology  
BIOL 212 Cellular Biology  
BIOL 255 Human Physiology &  
BIOL 257 Human Physiology Lab
- b. The following courses:  
BIOL 301 Biologic Investigations  
BIOL 304 General Genetics  
BIOL 305 General Physiology  
BIOL 490 Senior Seminar
- c. Four courses from the following list (one must be 400 level). Up to ten units of upper-division course work from outside the department may be substituted with advisor approval.

- BIOL 312 General Microbiology
- BIOL 342 Cell Physiology
- BIOL 351 Comparative Anatomy of Vertebrates **or**
- BIOL 451 Functional Analysis of Vertebrate Structure
- BIOL 355 Human Pathophysiology

- BIOL 414 Medical Microbiology
- BIOL 430 Molecular Biology
- BIOL 433 Developmental Biology
- BIOL 453 Comparative Physiology of Vertebrates

### **2. The following Chemistry courses:**

- CHEM 211 Chemistry Principles I
- CHEM 212 Chemistry Principles II
- CHEM 213 Principles of Chemical Analysis
- CHEM 331 Organic Chemistry I
- CHEM 332 Organic Chemistry II &
- CHEM 333 Organic Chemistry III **or**
- CHEM 340 Biochemistry

### **3. The following Physics courses:**

- PHYS 201 Newtonian Physics &
- PHYS 202 Maxwellian Physics &
- PHYS 203 Contemporary Physics **or**
- PHYS 221 Classical Physics I &
- PHYS 222 Classical Physics II &
- PHYS 223 Optics & Modern Physics

### **4. The following Mathematics courses:**

- MATH 191 College Algebra &
- MATH 192 Elementary Functions
- or**
- MATH 201 Calculus I &
- MATH 202 Calculus II

### **5. SCI 294 Computer Skills for Natural Sciences**

### **6. Chiropractic & Physical Therapy require:**

- BIOL 250 Human Anatomy
- PSYC 315 Abnormal Psychology

**Natural Sciences, Mathematics & Engineering**  
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