

Pre-Medical/Pre-Allied Health

(with a major in Biology)

Medicine, 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.

Most professional schools require a bachelor's degree for admission. 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 the Department of Biology for further information or to make an appointment with a faculty advisor.

Recommended Courses

This program is designed to provide the basic courses to meet entrance requirements for post-baccalaureate study in medicine, dentistry, veterinary medicine, pharmacology, chiropractic, and physical therapy while completing the B.S. degree in Biology.

1. A minimum of 65 units in Biology:

a. The following courses:

BIOL 201 Intro Biology-Cell
BIOL 202 Intro Biology-Animals
BIOL 203 Intro Biology-Plants
BIOL 304 General Genetics
BIOL 305 General Physiology
BIOL 306 General Ecology
BIOL 310 Research Design & Analysis
BIOL 470 Evolution
BIOL 490 Senior Seminar

b. Five courses from the following list (at least one must be 400 level and two must have a lab).

BIOL 312 General Microbiology
BIOL 342 Cell Physiology
BIOL 351 Comparative Vertebrate Anatomy
BIOL 355 Human Pathophysiology
BIOL 357 Human Physiology
BIOL 414 Medical Microbiology
BIOL 424 Evolutionary Genetics
BIOL 430 Molecular Biology
BIOL 433 Developmental Biology
BIOL 433 Developmental Biology
BIOL 451 Functional Analysis of Vertebrate Structure
BIOL 455 Physiological Measurements

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
MATH 201 Calculus I &
MATH 202 Calculus II **OR**
MATH 211 Calculus for Life Sciences &
MATH 212 Calculus II for Life Sciences

5. Chiropractic & Physical Therapy require:

BIOL 250 Human Anatomy
BIOL 255/256 Human Physiology **OR**
BIOL 357 Human Physiology
PSYC 315 Abnormal Psychology



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