

# SPRING SCIENCE ADVISING SHEET FOR FIRST-YEAR STUDENTS IN BL 262

## BIOLOGY COURSES

For students intending Majors in Biology, Biochemistry, Environmental Science, or Neuroscience OR students intending another Major but planning to pursue Chiropractic, Dental, Medical, Optometry, Pharmacy, Physical Therapy, Physician Assistant, Podiatry, or Veterinary School should TAKE...

**BL\*260 Principles of Biology: Molecular and Cellular 3 SH**

**AND**

**BL\*261 Molecular and Cellular Biology Laboratory 1 SH**

Students who have not taken a high school or college course in chemistry need to see Dr. Franco (SCI 201) for special permission before enrolling in BL 260 and BL 261.

## CHEMISTRY COURSES

For students currently or previously enrolled in CH 210 and CH 211 who also are intending Majors in Biology, Biochemistry, Chemistry, Environmental Science, or Neuroscience OR are intending another Major but are planning to pursue Chiropractic, Dental, Medical, Optometry, Pharmacy, Physical Therapy, Physician Assistant, Podiatry, or Veterinary School should TAKE...

**CH\*230 Principles of Chemistry II 4 SH**

**AND**

**CH\*231 Principles of Chemistry Laboratory II 1 SH**

## MATHEMATICS COURSES

For students intending Majors in Biology, Environmental Science, Neuroscience, or Psychology OR students intending another Major but planning to pursue Physical Therapy School it is recommended that the student TAKE the following course in the Freshman Spring or a semester the following year.

**MT\*272 Statistics for the Life Sciences 3 SH**

Biology, Neuroscience, and Psychology require MT\*272. Environmental Science *recommends* MT\*272 but will accept MT\*270 as well. Environmental Studies equally accepts either MT\*270 or MT\*272. Students interested in Physical Therapy school who take MT\*270 **also** will need to take MT\*370 or another statistics intensive course to gain admission to most schools.

For students intending Majors in Biochemistry, Chemistry, Computer Science, or Mathematics should TAKE (if Calculus I or Calculus II have not been previously completed)...

**MT\*360A Calculus I 4 SH**

**OR**

**MT\*360B Calculus II 4 SH**

Biochemistry, Chemistry, Computers Science, and Mathematics majors require completion of at least through MT\*360B Calculus II.

*Medical and most other graduate health programs require* 1 year (2 semesters) of mathematics of College Algebra/Trig. and higher. A small number of medical schools do require one or very rarely two semesters of calculus. (The vast majority of schools including the University of Colorado and all Jesuit medical schools *do not require* any calculus.)

A good combination of mathematics courses for health science schools is at least one semester of calculus and one semester of statistics for science.

## SOME PRE-HEALTH SCHOOL PRE-REQUISITES

### Medical & Dental School Pre-Requisites

BL 260 & BL 261 Molecular & Cellular Biology  
BL 262 & BL 263 Organismic Biology  
CH 210 & CH 211 Principles of Chemistry I  
CH 230 & CH 231 Principles of Chemistry II  
CH 250 & CH 251 Organic Chemistry I  
CH 350 & CH 351 Organic Chemistry II  
*EN 210 Freshman Literature*  
*EN Upper-Division Literature Elective*  
MT two collegiate mathematics courses (College Algebra with Trigonometry and higher)\*  
PH 204A or PH 202A & PH 205A General Physics I  
PH 204B or PH 202B & PH 205B General Physics II  
Medical schools require laboratories for all science courses.  
\* 16 of the 146 U.S. medical schools require calculus.

### Veterinary School Pre-Requisites

BL 260 & BL 261 Molecular & Cellular Biology  
BL 262 & BL 263 Organismic Biology  
BL 414 Principles of Genetics  
BL/CH 452A Biochemistry I  
CH 210 & CH 211 Principles of Chemistry I  
CH 230 & CH 231 Principles of Chemistry II  
CH 250 & CH 251 Organic Chemistry I  
CH 420 & CH 421 Organic Chemistry II  
*CCS 200 Freshman Writing Seminar*  
*EN 210 Freshman Literature*  
MT 272 Statistics for the Life Sciences (or a second semester of Calculus)  
MT 360A Calculus I  
PH 204A or PH 202A & PH 205A General Physics I  
PH 204B or PH 202B & PH 205B General Physics II\*  
\* A few vet. schools require only one physics course, and require BL 406/407 Comp. Vertebrate Anatomy & BL 418/419 Microbiology.

### Physician Assistant School Pre-Requisites

BL 260 & BL 261 Molecular & Cellular Biology  
BL 262 & BL 263 Organismic Biology  
BL 406 & BL 407 Comparative Vertebrate Anatomy\*  
BL 414 Principles of Genetics  
BL 418 & BL 419 Microbiology  
BL 436 Animal Physiology\*  
CH 210 & CH 211 Principles of Chemistry I  
CH 230 & CH 231 Principles of Chemistry II  
*CCS 200 Freshman Writing Seminar*  
*EN 210 Freshman Literature*  
*EN Upper-Division Literature Elective*  
*HS any course in history*  
MT 272 Statistics for the Life Sciences  
MT one semester additional mathematics (College Algebra with Trigonometry and higher, Calculus recommended)  
PL ethics course (PL 360 or PL 447)  
PY 250 General Psychology  
PY 460 or PY 461 or PY 462 Developmental Psychology  
(some schools will accept other PY courses)  
\* A few community college certificate programs accept BL 244/245 and BL 246/247 in lieu of upper division anat. and phys. courses. Other programs require upper-division anat. and phys. courses.

### Physical Therapy School Pre-Requisites

BL 244 & BL 245 Human Anatomy & Physiology I  
BL 246 & BL 247 Human Anatomy & Physiology II  
BL 260 & BL 261 Molecular & Cellular Biology\*  
BL 262 & BL 263 Organismic Biology\*  
CH 210 & CH 211 Principles of Chemistry I  
CH 230 & CH 231 Principles of Chemistry II  
*CCS 200 Freshman Writing Seminar*  
*COM 210 Speech Communication\**  
MT 272 Statistics for the Life Sciences  
MT 360A Calculus I\*  
PH 204A or PH 202A & PH 205A General Physics I  
PH 204B or PH 202B & PH 205B General Physics II  
PY 250 or PY 251 General Psychology  
PY 460 or PY 461 or PY 462 Developmental Psychology (some schools will accept other PY courses)  
A few schools also require Biomechanics (EXS 424).\*  
\*Not required for entry into the Regis RHSP P.T. Program but required for entry into most graduate Physical Therapy programs.

### Optometry School Pre-Requisites

BL 260 & BL 261 Molecular & Cellular Biology  
BL 262 & BL 263 Organismic Biology  
BL 418 & BL 419 Microbiology  
CH 210 & CH 211 Principles of Chemistry I  
CH 230 & CH 231 Principles of Chemistry II  
CH 250 & CH 251 Organic Chemistry I  
CH 350 & CH 351 Organic Chemistry II  
*CCS 200 Freshman Writing Seminar*  
*COM 210 Speech Communication*  
*EN 210 Freshman Literature*  
MT 272 Statistics for the Life Sciences (or a second semester of Calculus)  
MT 360A Calculus I  
PH 204A or PH 202A & PH 205A General Physics I  
PH 204B or PH 202B & PH 205B General Physics II\*  
PY 250 or PY 251 General Psychology  
PY 460 or PY 461 or PY 462 or PY 471 Developmental or Abnormal Psychology

### Pharmacy School Pre-Requisites

BL 246 Human Anatomy & Physiology: Regulatory Systems  
BL 260 & BL 261 Molecular & Cellular Biology  
BL 262 & BL 263 Organismic Biology  
BL 418 & BL 419 Microbiology  
CH 210 & CH 211 Principles of Chemistry I  
CH 230 & CH 231 Principles of Chemistry II  
CH 250 & CH 251 Organic Chemistry I  
CH 350 & CH 351 Organic Chemistry II  
*CCS 200 Freshman Writing Seminar*  
*COM 210 Speech Communication\**  
*EC 200 Introduction to the American Economy*  
MT 272 Statistics for the Life Sciences  
MT 360A Calculus I  
PH 204A or PH 202A & PH 205A General Physics I  
PH 204B or PH 202B & PH 205B General Physics II\*  
PY 250 General Psychology