

Preprofessional and Allied Health Advising Center

Preprofessional@du.edu (303) 871-3639

Pre-dental Advising

Dental programs, like medical programs have the following required courses:

- 1 Year of Introductory Biology with lab
- 1 Year of Inorganic Chemistry with lab
- 1 Year of Organic Chemistry with lab
- 1 Year of Physics with lab

Introductory Biology Requirement

BIOL 1011 (4 cr) Evolution, Heredity, and Biodiversity
BIOL 1021 (1cr) Evolution, Heredity, and Biodiversity Lab
BIOL 1010 (4 cr) Physiological Systems
BIOL 1020 (1cr) Physiological Systems lab
BIOL 2120 Cell Structure and Function (4cr)
BIOL 2125 Cell Structure lab (1 cr)

Inorganic Chemistry Requirement

CHEM 1010 General Chemistry (3 cr)
CHEM 1240 General Chemistry Lab (1 cr)
CHEM 2011 Analysis of Equilibrium (3 cr)
CHEM 2041 Analysis of Equilibrium Lab (1 cr)
CHEM 2131 Chemistry of the Elements (3 cr)
CHEM 2141 Chemistry of the Elements (1 cr)

Organic Chemistry Requirement

CHEM 2451 Organic Chemistry I (3 cr)
CHEM 2461 Organic Chemistry Lab (1 cr)
CHEM 2452 Organic Chemistry II (3 cr)
CHEM 2462 Organic Chemistry II Lab (1 cr)
CHEM 2453 Organic Chemistry III (3 cr)
CHEM 2463 Organic Chemistry Lab (1 cr)

Biochemistry Recommendation:

Biochemistry is recommended by a few dental schools (Check with the schools that you are considering.) The recommended course is:

CHEM 3811 Biochemistry-Proteins (3 cr)

Calculus Requirement

The calculus requirement is quite variable. Calculus is not currently on the DAT, and some dental schools may require a statistics course rather than a calculus course.(Check with the schools that you are considering).

Calculus Sequence (usually taken in years 1 or 2):

MATH 1951 – Calculus I (4 credits)

MATH 1952 – Calculus II (4 credits)

MATH 1953 – Calculus III (4 credits)

Physics Requirement

Physics is required for application to dental schools, but this material is NOT on the DAT. Hence, the physics sequence can be taken in senior year. This option makes going abroad in Fall of junior year possible.

General physics (algebra-based):

PHYS 1111 General Physics I (5 credits and includes the lab)

PHYS 1112 Gen. Physics II (5 credits and includes the lab)

PHYS 1113 Gen Physics III (5 credits and includes the lab)

Microbiology Requirement

More dental schools are requiring a course in microbiology. (Check with the schools you are considering.)

BIOL 3120 General Microbiology

In addition a second course related to microbiology may be required; we recommend:

BIOL 3670 Molecular Immunology

BIOL 3910 Viruses and Infectious Human Diseases

Courses helpful for the DAT

BIOL 3120 General Microbiology

BIOL 3250 Human Physiology

Courses helpful for the first year of Dental or Medical School

BIOL 2450 Human anatomy
BIOL 2510 General Genetics
BIOL 3100 Histology
BIOL 3120 General Microbiology
BIOL 3250 Human Physiology
BIOL 3640 Introductory Neurobiology
BIOL 3650 Endocrinology
BIOL 3670 Molecular Immunology
BIOL 3800 Human Molecular Biology
BIOL 3910 Viruses and Infectious Human Diseases

Courses helpful for preparing for an interview

PHIL 2700 Biomedical Ethics (There is also a biomedical ethics course offered through the Biology Department).

Recommended Course Schedule for the Required Courses

| Year 1 | Fall | Winter | Spring |
|---------------|-------------|---------------|---------------|
| | CHEM 1010 | CHEM2451 | CHEM 2452 |
| | CHEM 1240 | CHEM 2461 | CHEM 2462 |
| | | BIOL 1011 | BIOL 1010 |
| | | BIOL 1021 | BIOL 1020 |
| Year 2 | Fall | Winter | Spring |
| | CHEM 2453 | CHEM 2011 | CHEM 2131 |
| | CHEM 2462 | CHEM 2041 | CHEM 2141 |
| | BIOL 2120 | | |
| | BIOL 2125 | | |
| Year 3 | Fall | Winter | Spring |
| | PHYS 1111* | PHYS 1112 | PHYS 1113 |

*PHYS 1111 can be taken in the first summer session after the 2nd year at DU, and then Fall of the 3rd Year will be open for Study Abroad. **Another option is to take Physics in Year 4.**