



21250 Stevens Creek Blvd.
Cupertino, CA 95014
408-864-5678
www.deanza.edu

Academic Year
2016 - 2017

Biological Sciences

Biological, Health and
Environmental Sciences Division
Kirsch Center, Room 228
408-864-8773

Counseling and Advising Center
Student and Community
Services Bldg., 2nd Fl.
408-864-5400

Please visit the Counseling Center to apply for degrees and for academic planning assistance.

A.A./A.S. Degree Requirements

1. Completion of all General Education (GE) requirements (31-42 quarter units) for the A.A./A.S. degree. GE units must be completed with a minimum 2.0 GPA ("C" average).
2. Completion of all major requirements. Each major course must be completed with a minimum "C" grade.
Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees).
Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.
3. Completion of a minimum of 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA ("C" average). All De Anza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA ("C" average).
Note: A minimum of 24 quarter units must be earned at De Anza College.

Major courses for certificates and degrees must be completed with a letter grade unless a particular course is only offered on a pass/no-pass basis.

Biological Sciences

A.S. Degree

The purpose of the Biological Sciences A.S. Degree is to provide a lower division science foundation for those interested in pursuing a Bachelors degree in Biology/Biological Sciences. This major prepares students for transfer to any University of California or California State University campus. A major in Biological Sciences prepares students for advanced academic work and for careers in civil service, industry or teaching. It also provides a background for professional training in such fields as biotechnology, public health, nutrition, laboratory and field research, medicine, dentistry, pharmacy and veterinary medicine.

Student Learning Outcomes - upon completion, students will be able to:

- design and complete a biological research project applying scientific methods.
- correlate structure and function in biological systems.

1. Meet the A.A./A.S. degree requirements.
2. Complete the following.

| | | |
|-------------|--|---|
| BIOL 6A | Form and Function in the Biological World | 6 |
| or BIOL 6AH | Form and Function in the Biological World - HONORS | 6 |
| BIOL 6B | Cell and Molecular Biology | 6 |
| BIOL 6C | Ecology and Evolution | 6 |
| or BIOL 6CH | Ecology and Evolution - HONORS | 6 |
| CHEM 1A | General Chemistry | 5 |
| CHEM 1B | General Chemistry | 5 |
| CHEM 1C | General Chemistry and Qualitative Analysis | 5 |

Complete one (1) sequence:

15-18

Option 1: Organic Chemistry

| | |
|----------|-----------------------|
| CHEM 12A | Organic Chemistry (5) |
| CHEM 12B | Organic Chemistry (5) |
| CHEM 12C | Organic Chemistry (5) |

Option 2: Physics - General

| | |
|---------|----------------------------------|
| PHYS 2A | General Introductory Physics (5) |
| PHYS 2B | General Introductory Physics (5) |
| PHYS 2C | General Introductory Physics (5) |

Option 3: Physics - Engineers

| | |
|---------|--|
| PHYS 4A | Physics for Scientists and Engineers: Mechanics (6) |
| PHYS 4B | Physics for Scientists and Engineers: Electricity and Magnetism (6) |
| PHYS 4C | Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6) |

| | | |
|-----------------------------------|--|-----------|
| Major | Biological Sciences | 48-51 |
| GE | General Education (31-42 units) | |
| Electives | Elective courses required when major units plus GE units total is less than 90 | |
| Total Units Required | | 90 |

Recommended elective courses

BIOL 13, 15, 26, 40A, 40B, 40C
E S 1
ESCI 19
MATH 1A, 1AH, 1B, 1BH, 1C, 1CH, 1D, 1DH, 10, 10H

For students planning to transfer to a four-year institution, it may be beneficial to complete both the Organic Chemistry option and either Physics option. Course sequences in chemistry and physics are required in most B.S. Biology programs. For your specific transfer situation, please visit the Counseling Center and consult with the four-year institution.