Outline of General Biology

Course Description

General Biology (BIO 160) provides a foundation for the various branches of biological studies. This course often builds a familiarity with cellular and molecular biology, ecology, evolution and the diversity of life.

Typical Course Mechanics

- 4 hours of lecture a week (or 5 hours online video)
- 4 hours of lab a week
- Expect at least one midterm and a final, though most classes break up the tests into 4-5 midterms

Generally, a student should expect to spend 8 hours a week covering lecture and lab instruction and an additional 5-10 hours a week doing homework and studying.

Communicate in advance of any absence. You may not be able to make-up missed labs.

Topics Generally Covered

- Cells Structure
- Cellular Interactions
- Biological Macromolecules
- Cellular Respiration
- Photosynthesis
- Mitosis
- Meiosis
- Genetics
- Evolution
- Phylogenies
- Biodiversity
- Plant Reproduction
- Ecosystems

PREPARING FOR THE COURSE

PRE-REQUISITE KNOWLEDGE OR SKILLS

Because this course is a pre-requisite for higher-level science courses, there often aren’t any required courses prior to this one. It is often suggested that a student take introductory chemistry or have taken chemistry/biology in high-school before taking this course. If you haven’t taken college-level chemistry or high-school biology/chemistry (or it has been a long time) you may want to preview the following topics:

<table>
<thead>
<tr>
<th>Topics</th>
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<tbody>
<tr>
<td>Atoms &amp; Molecules</td>
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<td>Chemical Bonding</td>
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<tr>
<td>Acids &amp; Bases</td>
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<td>Properties of Water</td>
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<td>Cells</td>
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Review for the above topics can be done using online resources such as www.khanacademy.org or referring to your prior course materials. Brushing up or previewing these topics can help you get a better idea of what may be presented during your course.

ADDITIONAL RESOURCES

Books & Supplies

Most classes require a textbook and may or may not require a lab manual. Often instructors will post lab and class assignments on online classroom portals rather than making you buy a packet beforehand. Try to learn about which online system they’ll be using.

Study Support

Instructor office hours and institutional study labs are always a great place to get support but the Training Fund also has both in-person tutoring and online (Tutor.com) tutoring options available year-round! Visit: www.healthcareerfund.org/tutoring to learn more!