Course Advisement

Phoenix College Biology Department
2006-2007

BIO182: General Biology for Majors II

Lead instructor: Phil Pepe, Ph.D., 602-285-7106

ASU Transfer Information:

- BIO 187, Natural Science - General (SG),

Lecture format:

- Power Point is used during every lecture period to present lecture material.
- Power Point outlines are provided to supplement every lecture.
- Each student is expected to turn in a completed form reporting their results at the end of each lecture.

Laboratory Format:

- Hands-on activities are performed during every lab session by individual students or groups of 2 to 4 students.
- Activities include exposure to living and dead organisms and chemicals.
- Each student is expected to demonstrate their proficiency at operating lab equipment.
- Each student is expected to turn in a completed form reporting their results at the end of each lab.

In-Class Examination format:

- In class multiple-choice quizzes (6).
- Optional cumulative multiple-choice final (1).

Homework Assignments such as reading and writing:

- Readings in chapters (24) of textbook.
- Sets of short answer questions (10) based on text book readings.
- Essays (5).
- Scientific lab paper (1).

Attendance policy:

- Attendance is required and will be recorded in both lecture and laboratory.
- Two of the laboratory sessions will be held off campus at nearby Phoenix locations. It is the student's responsibility to meet at the field trip location and to pay minor entry fees.

Prerequisites and expectations of prior experience or knowledge on a given subject:

- BIO181 General Biology for Majors I is a prerequisite.
- The prerequisite is required to establish a basic understanding of the following:

1. Cell structure
2. Membrane structure
3. Membrane function
4. DNA replication
5. Protein synthesis
6. Enzymes
7. Metabolism
8. Cell respiration
9. Cell reproduction
10. Photosynthesis
11. Cell reproduction
10. Mendelian genetics
11. Chemistry of solutions
12. pH, acids, bases, and buffers
13. Osmosis and diffusion
14. Use of microscopes
15. Use of balances
16. Use of pipettes & volumetric devices
17. Use of pH meters
18. Use of spectrophotometers

Skills that help students succeed:

- Ability to understand written and verbal instructions are essential.
- Strong study habits and time management skills are essential.
- College level reading and writing abilities are important.
- High School Algebra skills and basic computer literacy are important.