

**COURSE OVERVIEW**  
**GENERAL BIOLOGY ONLINE**  
**PLB 115/ZOOL 115 – SECTION 950**

Life in the 21<sup>st</sup> century is becoming increasingly dependent upon science and technology, with advances in biology, biotechnology, and medicine impacting all of our lives. As part of the University Core Curriculum, this course likely represents the only contact with biological science that most of you will have at SIUC. The overarching goal is to improve the functional scientific literacy of students so they can make informed choices in their lives when confronted with choices involving biological questions. The introduction to biology students receive in this course is presented in the context of **five** learning objectives.

**STUDENT LEARNING OBJECTIVES:**

At the completion of this course, students should be able to:

- Demonstrate how the scientific method is applied to the study of living organisms
- Use a basic vocabulary, to read and converse intelligently about biological issues
- Describe the basics of the major unifying life processes to understand how living organisms (including humans) function
- Build an understanding of the unique role of humans in the biosphere
- Introduce the student to biodiversity and instill an appreciation for the impact of biotechnology on future lifestyles and decisions

**DETAILED COURSE DESCRIPTION:**

This course is an introduction to basic biological concepts for students who are not life science majors, but have an interest in learning about the interdependence and nature of humans in their biological environment. Emphasis will be placed on understanding the scientific method, the fundamentals of living processes, environmental interactions, biological diversity, and the relevance of biology to the student and to the future of the world. Representative course topics: Introduction to Biology and the Scientific Method; The Chemistry of Life; The Cellular Basis of Life; Evolution; Ecology; Biodiversity; Physiological Processes.

**REQUIRED READING MATERIALS:**

Enger ED, Ross FC, Bailey DB. 2009. *Concepts in Biology*, 14th ed. Boston: McGraw-Hill Higher Education. (available in all bookstores and online from multiple sources)

Ebbs SD. 2011. *Study Guide and Laboratory Manual for General Biology Online*. (Available electronically on the course Desire2Learn site or as a printed document through the SIUC campus bookstore in the Student Center)

Online readings posted to Desire2Learn (D2L) (<https://online.siu.edu>)

**DESIRE2LEARN URL**

<https://online.siu.edu>

### **COURSE FORMAT:**

PLB/ZOOL 115 - 950 is a **semester-based distance education course**. “Semester-based” means that students are expected to complete the entire course in a single semester. The semester is divided into four quarters, with each quarter corresponding 25% of the length of the semester. Within each quarter there are generally three learning modules to complete. Quizzes and exams associated with those modules are open and available for that quarter and then close. If a quiz or exam within a quarter is not completed during the open period, students cannot go back to complete them. Just as in a regular course, there are penalties for not completed assigned work on time. Missing scores are counted zeros for the purpose of calculating the final grade is calculated. Students are strongly encouraged to work at a steady pace in the course to insure timely progress toward completion.

The course has 12 learning modules. Each learning module includes a reading assignment from the textbook (usually one to two chapters). Some learning modules also include readings from electronic resources posted on the course D2L site. The reading assignments for each module are specified in the accessory document required for this course. A **Module Study Guide** is also provided in the course manual, which indicates the central concepts of that module (which also correspond to the subjects covered on the examinations). Six of the learning modules also include a virtual laboratory exercise which provides interactive exercises to reinforce key concepts from that learning module. The learning modules must be completed in a specific sequence, which corresponds for the most part to the order of the textbook chapters. There are several dependencies within the learning module structure, meaning that specific components must be completed before subsequent components become visible on the D2L site and can be accessed. The **Course Checklist** (also in the manual) shows the sequence of learning modules and the milestones that must be reached before subsequent components of the course are released.

### **STUDY RESOURCES:**

There are three study resources that students can use to prepare for examinations and the final exam. Additional detail on these resources is provided in the Module Study Guide. The first is the textbook. The second is the suite of study aids on the textbook website provided by the publisher (the link can be found throughout the course’s D2L site). The third is a set of practice questions on D2L for each Learning Module. The laboratory quizzes use an open laboratory manual format. Hence, careful attention to the laboratory exercises is also a form of review.

### **COURSE REQUIREMENTS AND GRADING**

The grade in this course is based upon the following quizzes and examinations. There are a total of 500 points available in the course, distributed as follows:

- Examinations                      4 @ 90 pts      (72%)
- Laboratory quizzes                6 @ 15 pts      (18%)
- Comprehensive final               1 @ 50 pts      (10%)

All graded components in this course are delivered online through D2L. The D2L terminology refers to both quizzes and examination as “quizzes”, but the description for each clearly indicates what type it is. Quizzes have a time limit of 25 minutes while examinations have a time limit of 60 minutes. The final exam has a time limit of 45 minutes. If any online assessment is not completed within the allotted time, the score is rendered invalid. The four examinations and the

final exam must be proctored (see the information in the Course Policies on the D2L site). The six laboratory quizzes do not require a proctor. Quizzes or examinations can be taken multiple times with the HIGHEST score of the four attempts will be used in the calculation of the score. Note that if a quiz or exam is taken more than once, D2L automatically generates a new, unique question set for each attempt so that no two quizzes or exams on a particular topic are identical. The final exam can only be taken once. The grading rubric is:

- 450 – 500 points      (90-100%)      = A
- 400 – 449 points      (80-89%)      = B
- 350 – 399 points      (70-79%)      = C
- 300 – 349 points      (60-69%)      = D
- 299 points or less      (<60%)      = F

### **BONUS POINTS**

Within the Virtual laboratory exercises there are a number of “Challenge Questions”. The Challenge Questions should be completed during the course of the corresponding Virtual Laboratory. Once the final exam is completed, a document will be released listing all those Challenge Questions and the point values for each question. If bonus points are desired, the answers from any or all of the Challenge Questions can be copied into this document and the document uploaded to the appropriate dropbox in D2L. Note that the extra credit material must be submitted before the end of the final exam week. Late submissions will not be scored or included in the final grade for the course. The instructor will review the answers submitted and assign full, partial, or no credit for each answer submitted. Points earned (if any) up to a maximum of 35 pts will be entered into the indicated column in the D2L grade book. There is no penalty if no answers are submitted.

### **CONTACTING THE INSTRUCTOR**

The D2L environment includes an internal mail system and chat rooms for the course. To reach the instructor, the most effective mechanism is to send an e-mail through D2L. The instructor will respond through D2L as soon as possible. The “Who’s Online” selection from the course menu can also be used to determine if the instructor is currently online and available in a chat room.