

Clarendon College  
Division of Science and Health  
Spring 2012

**Course Name:** BIOL 1407: Biology for Science Majors II

**Credit Hours:** 4

**Semester:** Spring 2012

**Instructor:** Russell Killingsworth, DVM

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**Office Hours:** Monday – Friday 7:45am – 8:20am, after 3:45 by appointment

**Course Description:** Topics in Biology II include principles of evolution, a history of life, systematics, the diversity of life-forms (viruses, prokaryotes, protists, fungi, plants, & animals), and ecology. Laboratory includes techniques reinforcing the lecture material.

**Statement of Purpose:** Biology II partially satisfies the requirements for the Associates Degree at Clarendon College and is designed for transfer to a senior college.

**Required Texts:** *Biology Life on Earth with Physiology* 8<sup>th</sup> Edition by Audesirk et al

Class lectures will be based on the book chapters, but not all of the material in the text will be covered in class. Further, supplemental material may be presented that is not in the book, and thus it is essential that you attend the class regularly.

**Methods of Instruction:** This course will utilize lecture/discussion, audio-visual materials, and individualized lab instruction.

**Exemplary Course Objectives:** Successful completion of Biology II should enable the student to...

- Understand and apply methods and appropriate technology to the study of natural sciences.
- Recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
- Identify and recognize the differences among competing scientific theories.
- Demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
- Demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

**Student Learning Outcomes:** Upon successful completion of Biology II, the student should be able to...

- Understand the Theory of Evolution as presented by Charles Darwin.
- Understand the various concepts of how life began and comprehend the role extinctions have played on the history of life.
- Demonstrate knowledge of how organisms are named and classified with systematic relationships and the use of taxonomic keys.
- Prepare and examine preserved animal necropsies to identify major body organs.
- Appraise ecological concepts (the relationships between plants, animals, and humans and their environments).
- Compare and contrast the major phyla of protists, fungi, plants, and animals.

**Grading Policies:** You will receive one letter grade for BIOL 1407. That grade comes from three components: Four lecture exams at 15% each, homework/quiz average 15%, and lab average 15%.

Grading Scale for the Course:

89.5 – 100	A
79.5 – 89.4	B
69.5 – 79.4	C
59.5 – 69.4	D
59.4 and below	F

Tentative Lecture Topics

- Ch 14 Principles of Evolution
- Ch 15 How Organisms Evolve
- Ch 16 The Origin of the Species
- Ch 17 The History of Life
- Ch 18 Systematics
- Ch 19 The Diversity of Prokaryotes and Viruses
- Ch 20 The Diversity of Protists
- Ch 22 The Diversity of Fungi
- Ch 21 The Diversity of Plants
- Ch 42 Plant Anatomy and Nutrient Transport
- Ch 43 Plant Reproduction and Development
- Ch 23 Animal Diversity I: Invertebrates
- Ch 24 Animal Diversity II: Vertebrates
- Ch 39 Population Growth and Regulation
- Ch 40 Community Interactions
- Ch 41 How do Ecosystems Work?

Lab Activities

- Create a dichotomous key
- Virus identification
- Fungi identification
- Plant life cycles
- Roots, stems, and leaves
- Seed, fruit, and flower parts
- Dissection of worm, crawfish, fish, shark, frog, rat, and cat

**Academic Integrity: An Excerpt from Clarendon College's Student Handbook**

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information

during an examination , classroom activity, laboratory exercise, or homework assignment ; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit.

Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Instruction when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved.

Students who are reported as cheating to the Dean of Instruction more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

#### American with Disabilities Act Statement:

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687-9737). We will work with you to make whatever accommodations we need to make.

#### Dropping a Course:

If you decide that you are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on your transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript.

A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12<sup>th</sup> class week.

**The last day to withdraw from this course with a "W" is Friday, April 13, 2012.**

**Remember, a student is only allowed to drop the same class twice before he/she will be charged triple the tuition amount for taking the class a third time or more. Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6, he/she will no longer be able to withdraw from any classes.**

#### Withdrawal from College:

When a student finds it necessary to withdraw from school before the end of the semester, he or she should obtain a withdrawal form from the Office of Student Services. Students may also withdraw from the college by sending a written request for such action to the Registrar's Office. The request must include the student's signature, the student's current address, social security number and course information details. Students who withdraw after the census date for the semester and on or before the end of the 12<sup>th</sup> week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar will be assigned a grade of "W."



