



## Biology for Science Major 2 (BIOL 1307) - Lecture

**Credit:** 3 semester credit hours (3 hours of lecture)

**Co-requisite:** BIOL 1107 Biology for Science Majors II Laboratory

**Prerequisite:** Passed the BIOL 1306 (Biology for Science Majors I Lecture) and 1106 (Biology for Science Majors I Laboratory)

### Course Description

BIOL 1307 Biology for Science Majors II (lecture)

This lecture-based course accompanies BIOL 1107, Biology Science Majors II lab. This lecture course provides a survey of diversity and classification of life including animals, plants, protists, fungi, evolution of plants and animals.

### Required Textbook and Material

. Openstax ISBN-10: 1-947172-51-4

<https://openstax.org/details/books/biology-2e>

### Course Objectives

Upon successful completion of this course, students will:

1. Describe modern evolutionary synthesis, natural selection, and speciation.
2. Explain phylogenetic relationships and classification schemes.
3. Identify the major phyla of life based on plants and animals structure, classification, evolution, and ecology significance.
4. Determine animal physiology and hemostasis as maintained by organ system.
5. Compare and contrast the structures, reproduction (sexual and asexual) life cycle with regard to their adaptive advantages.
6. Identify the relationship between major geologic changes, extinctions and evolutionary trend.

### Course Outline

Welcome to LIT, introduction to science, the syllabus and course and department policies

#### I. Evolution

- A. Darwin view of life and natural selection
- B. Evolution of population
- C. Micro and Macroevolution
- D. The origin of species
- E. History of life on the earth

#### II. Phylogeny and the tree of life

- A. Virus
- B. Bacteria
- C. Archaea

D. Protists

III. Plants

1. Diversity and development

IV .Fungi

V. Animal

1. Diversity and development
2. Physiology and Homeostasis
3. Nutrition

VI. Ecology (Extinction pattern and evolutionary trend)

1. Introduction
2. Population ecology
3. Community ecology
4. Ecosystem

**Grade Scale:**

89.5 – 100	A
79.5 – 89.4	B
69.5 – 79.4	C
59.5 – 69.4	D
Below 59.4-	F

**Course Policies**

- No late assignments will be accepted unless covered by a college excused absence.
- Exams. There will be three lecture exams plus final exam.
- Video quizzes 10%
- If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an 'F' in the course.

**Academic Dishonesty**

Cheating and Plagiarism are two types of academic dishonesty.

Cheating is taking an examination or test in a dishonest way, as by improper access to answers. Plagiarism is taking someone else's work and misrepresenting it as your own. Student's work should always be his/her own unless participating in a group project. Cheating and/or plagiarism will result in disciplinary action; i.e., zero on assignment/exam or an F in the course, expulsion, etc.

**Students with Disabilities**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with

disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator, (409) 880-1737 or visit the office located in the Cecil Beeson Building.

### **Starfish**

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.



The 'base' syllabus plus addendum pages will be linked to the faculty member's webpage.