**Syllabus:** Biology II for Science Majors - **LABORATORY**
**Course Number:** **BIOL 1107**
**Semester & Year:** SPRING 2020

**Instructor Information**

 Name: Prof. Mark Storey
 Office: Chemistry Building Rm. 202
 Telephone: 903-823-3298
 E-mail: Mark.Storey@texarkanacollege.edu

Office Hours: by appointment *(please email for an appointment)*

**Textbook Information**

* BIOL 1107 Lab Course TC Online (Moodle) LMS: download / print lab exercises handouts
* Biology – Openstax Rice University (alternative textbook) <https://openstaxcollege.org/textbooks/biology>
* Protective clothing - Safety glasses will be required for certain lab activities, lab coat or apron (old work shirt) is encouraged.

**Student Learning Outcomes for the Course**

*At the conclusion of the* ***laboratory portion*** *of this course students should be able to:*

1. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of investigations.
4. Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
5. Distinguish between phylogenetic relationships and classification schemes.
6. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
7. Describe basic animal physiology and homeostasis as maintained by organ systems.
8. Compare different sexual and asexual life cycles noting their adaptive advantages.
9. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

**Lab Reports and other written assignments** in lab are due at the beginning of the class session and will be penalized 10% for being late for the first 24 hours and 20% for the second 24 hours and will not be accepted after 48 hours. Late work can be turned in via e-mail to my e-mail address: *Mark.Storey@texarkanacollege.edu*

**Group Work:** **If you are absent during a lab unit, (or you fail to contribute to the group in a significant way during a lab session) your individual grade for that unit will be penalized 20% for each day from the group score earned for that unit**. **If a lab unit is completed in one lab session during your absence you will receive a zero (0) for that exercise.**

**Student Requirements for Completion of the Course**

**Laboratory Topics/ Exams - Biology 1107**

**Unit I**

DNA Extraction

Biotechnology Revolution / Ethics

Phage Lambda DNA Gel Electrophoresis

Day Mesozoic Died Activity

Stickleback Evolution Activity

***Lab Exam I***

**Unit II**

Taxonomy Systems

Biological Diversity Survey Bacteria and Protista Part I

Protists Part II

Mosses / Liverworts

***Lab Exam II***

**Unit III**

Tracheophytes

Gymnosperms

Kingdom Animalia – Intro to Invertebrates

Coelomates

Vertebrates

***Lab Exam III***

**The course grade is available on myTC on the student tab and will be calculated from the following schedule:**

|  |  |
| --- | --- |
| **Laboratory Exams (3)**  | **60%** |
| **Lab Reports** | **40%** |
| **Total** | **100%** |

**Grading Scale**

|  |  |
| --- | --- |
| **Semester Grade**  | **Course Average** |
| **A** | 89.5-100 |
| **B** | 79.5-89.4 |
| **C** | 69.5-79.4 |
| **D** | 59.5-69.4 |
| **F** | 59.4-below |

**Make-up Policy**

**Lab Exams cannot be made up in this course. If you know you are going to miss a lab exam you will need to make arrangements with the instructor to take the exam in advance.**

**ABSENTEE POLICY** (TC Official Policy)

**Texarkana College’s absentee policy allows instructors to withdraw a student from a course due to excessive absences.** *If a student leaves and returns during class or leaves the class before the class is over, he/she may be considered absent. Three tardies constitute one absence. Check the syllabus for each class to see how much time you are allowed to be late before the tardy is counted as an absence.*

**Faculty members are not obligated to provide opportunities for students to make-up missed assignments and tests as a result of a student’s absence from class. Do no stop attending a class without formally withdrawing from the course by the institution’s published Last Day to Drop. If a student does not attend class and does not withdraw from the class, the student will receive a grade of F in the class.** *The published Last Day to Drop applies to students; an instructor may withdraw a student for excessive absences at any time during the semester.*

**Withdrawal from a course(s) may affect a student’s current or future financial aid eligibility. Students should consult the Financial Aid Office to learn both short and long term consequences of a withdrawal.**

**EXCUSED ABSENCES**

*A student’s absence due to school trips and/or school business will not be counted against a student’s allowable number of absences. Military duty and absences for Holy Days (FBD LEGAL) are covered in a separate section of the catalog and the student handbook. These are the only types of absences that are considered excused by Texarkana College.* **Responsibility for work missed for any absence is placed on the student.** *Instructors are required to allow students to make up work missed if the absence is due to military duty or religious holy days when students follow the correct notification procedures.* **Instructors are not required to allow students to make up work for absences due to other reasons. Make-up policies are listed in each individual instructor’s syllabus.**

**MAXIMUM ALLOWABLE ABSENCES**

The following number of unexcused absences will be the maximum allowable before a student may be dropped from the class: **The maximum number of absences in this laboratory class is four (4) per semester (the equivalent of two (2) weeks of instruction).**

**Please Note: This class begins on time. If you arrive late and up to ten minutes after class has begun you will be marked tardy. Three (3) tardies are equivalent to one (1) absence!**

Students that sleep during class or ignore this class because they are busy texting, chatting, checking social media sites or doing homework for other classes or do not participate in class activities for any other reason, **may be marked as absent.**

**You can view your attendance record on the *myTC* portal under the student tab.**

**WARNING: If you exceed the maximum number of absences for this course you may be be dropped (W) from the course.**

If circumstances develop (e.g. extended illness, moving from the city, etc.) which necessitates your withdrawal from this or any other course be sure to let me know AND officially withdraw in the Director of Admissions office located in the C. M. Nelson Administration building. The date each semester is posted on the inside page of the current Texarkana College Catalog / Website under "Academic Calendar". A grade of W is recorded on your permanent transcript*if**you withdraw before the official deadline*.

**Class Conduct**

 Students are expected to conduct themselves as adults. **There will be a zero tolerance policy for any behavior that is disruptive of classroom learning.  This includes ANY use of vulgar language or rude behavior toward instructor or any other student in the class.** Any student who acts in such a manner as to disturb the class and interfere with the learning process will be expelled from the course with a grade of "F". **No music players or cellular phones are permitted in my classroom**. **No texting or talking on a phone or messaging device during class.**

**Any student that has a cell phone or any electronic communications device in their possession during any quiz or examination will receive a zero (0) for the quiz or examination. NO EXEPTIONS! You will also be counted absent for that class session.**

**All electronic devices** (e.g. audio recorders, laptop/tablet computers etc.) brought into class must be cleared by the instructor for use for **each** class session.

**Academic Integrity Statement**

Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, col­lusion, or falsification of records will make the student liable for disciplinary action after being investigated by the Dean of Students. Proven violations of this nature will result in the student being dropped from the class with an “F”.

This policy applies campus wide, including TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at <https://texarkanacollege.edu>.

**Disability Act Statement:**

Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact Prof. Tonja Blaise at 903.823.3283. If you have an accommodation letter from their office indicating that you have a disability which requires academic accommodations, please present it to me so we can discuss the accommodations that you might need for this class. *It is best to request these changes at the beginning if not before the start of class* so there is ample time to make the accommodations.

**Financial Aid:**

**Attention!** Dropping this class may affect your funding in a negative way! You could owe money to the college and/or federal government. Please check with the Financial Aid office before making a decision.

# Course Continuity Plan

In the case that the college officially closes because of an emergency (inclement weather etc.) which causes a short term disruption of this course, we will use the TC Moodle CMS (“TC Online”) and TC student e-mail to continue this course in the short term. All students need to use their campus e-mail to receive course related information.

**I reserve the right to modify the syllabus at any time during the semester. The online version of this syllabus (*TC Online CMS*) is the official syllabus and supersedes all versions of this document in print.**

By signing this statement, I agree that I have read and understand what is expected of me to perform satisfactorily in this course of study.

*I also understand that any photographic and or audio recordings that are made of students including myself) during this class of are the property of Texarkana College and can be used to promote the educational mission of Texarkana College.*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Student Name (**PRINT** First & LAST NAME)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Legal Signature

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
TC Course Number / Section Number

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Date