**Syllabus:** **Biology I** for Science Majors - **LABORATORY**
**Course Number:** **BIOL 1106**
**Semester & Year:** *16 week format*

**Instructor Information**

 Name: Mark Storey
 Office: Biology Building Rm 29
 Telephone: 903-823-3298
 E-mail: **Mark.Storey@texarkanacollege.edu**

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

**Textbook Information**

* **Lab Packet – BIOL 1106 TC Bookstore (required)**
* Biology – Openstax Rice University (FREE download /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. Describe the characteristics of life.
5. Explain the methods of inquiry used by scientists.
6. Identify the basic properties of substances needed for life.
7. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
8. Describe the structure of cell membranes and the movement of molecules across a membrane.
9. Identify the substrates, products, and important chemical pathways in metabolism.
10. Identify the principles of inheritance and solve classical genetic problems.
11. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
12. Describe the unity and diversity of life and the evidence for evolution through natural selection.

**Lab Reports and other written assignments** in lab are due at the beginning of the class session and will be penalized 20% 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 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 1106 See grades on the myTC portal under the Student tab.**

**Unit I**

 Laboratory Safety

 Soybeans & SO2 - Experimental Design

 Scientific Measurement
 The Microscope
 Intro to Lab Quest & Data Collection and Analysis (Temperature Change of a Solution of Weak Acid and a Weak Base)
The Cell

**Lab Exam I (Unit I) (Week # 6 of semester)**

**Unit II**

Diffusion / Osmosis

Enzymes (Catalase Lab)

Chlorophyll – Chromatography of spinach leaves

Aerobic Cellular Respiration of Yeast / Peas

Cell Division Cell Cycle Mitosis

Cell Division – Meiosis

Monohybrid and Dihybrid Crosses Problem Sets (Mendelian Genetics and exceptions)

DNA Replication

Transcription and Translation (Protein Synthesis)

**Lab Exam II (Unit II) (Week # 15 of semester)**

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

|  |  |
| --- | --- |
| **Laboratory Exams (2)**  | **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 can not 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.**

**Attendance Policy**

Attendance for internet classes is based on accessing course materials and submitting assignments.  If a student stops accessing materials and sending assignments, the date of the last report of activity will be submitted to the Registrar, and a grade of “F” will be recorded.   As a result the student may lose scholarships or grants or have to repay funds already rewarded.  The TC absentee policy is pasted below:

**ABSENTEE 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. It is the student’s responsibility to check the syllabus for each instructor’s tardy policy.

In some workforce/vocational areas, such as nursing and cosmetology, certification requirements necessitate an absentee policy that is more stringent than the institutional policy. In these instances, the matter of certification takes precedence over local policies, since certification policies are established by the State of Texas.

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.

A student should not stop attending a class without formally withdrawing from the course by the institutions published Last Day for Students to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student **may** receive a grade of “F” in the class. The instructor will submit the last date of attendance for students receiving a grade of “F” or “W”.

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 excused absences that are considered 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.

*\*Students interested in Health Occupations should check with the division chair prior to entering the program.*

**ONLINE/HYBRID COURSE ABSENCES**Absence in an **online course** is defined as the lack of an active post or submission within the course including discussion board posts, written assignments, and tests. This standard will be used to determine all absentee issues, including but not limited to, 12th Day Census Reports, last date of attendance, and involuntary withdrawal from a course due to absences. All online students must complete an Enrollment Verification activity within the first week of class (activity depends upon the professor); otherwise the professor **may** drop the student for not having attended. Students must complete at least one activity in their online class per week.  Each week in which a student does not complete an activity will be counted as an absence.

If a student is taking a hybrid course, and it does not meet during the first week of class, the student must also complete an Enrollment Verification activity within the first week of class; otherwise the student **may** be dropped for not having attended.

**MAXIMUM ALLOWABLE ABSENCES**After official registration, the following number of unexcused absences will be the maximum allowable before a student **may** be dropped from the class. Mandated program certification requirements detailed for certain programs regarding the maximum allowable unexcused absences takes precedence over the following information.

**Academic Classes**

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| **A COURSE THAT MEETS FOR THE FULL 16 WEEK SEMESTER** |
| Class or Lab Meets:Once a week (Night classes or Friday classes)Twice a week  (MW or TR classes)Three times a week (MWF or TRF classes)Four times a week (MTWR classes) |  An instructor **may** withdraw a student from a course if absences exceed:2468 Three tardies count as one absence  |
| **A COURSE THAT MEETS FOR 14 WEEKS OF THE SEMESTER** |
|  Class or Lab Meets:  Twice a week (MW or TR classes) |  An instructor **may** withdraw a student from a course if absences exceed: 4 Three tardies count as one absence.   |
| **A COURSE THAT MEETS FOR 8 WEEKS OF THE SEMESTER (Fast-Track)** |
|  Class or Lab Meets:  Four times a week (MTWR classes) |  An instructor **may** withdraw a student from a course if absences exceed: 4Three tardies count as one absence.  |
| **A COURSE THAT MEETS FOR 5 WEEKS OF THE SEMESTER (Summer Sessions)** |
|  Class or Lab Meets:  3 times a week (MTW) (evening classes)4 times a week (MTWR) (day classes)  |  An instructor **may** withdraw a student from a course if absences exceed: 22Three tardies count as one absence.  |

**Workforce Classes** (**This does not include Health Occupations. See Health Occupations Handbook regarding absences for that program.)**

|  |  |
| --- | --- |
| Day Classes | Evening Classes |
|  Class meets: 5 days a week (MTWRF) The instructor **may** withdraw a student from a course if absences exceed five (5) up until the published Last Day for Students to Drop.  Absences that exceed this number after the drop day may result in the student receiving an “F” in the program for that semester. Three tardies count as one absence. You are considered tardy from the designated class start time through the first 15 minutes of class. After that you will be counted absent. |  Class Meets: 4 evenings a week (MTWR) The instructor **may** withdraw a student from a course if absences exceed five (5) up until the published Last Day for Students to Drop.  Absences that exceed this number after the drop day may result in the student receiving an “F” in the program for that semester. Three tardies count as one absence. You are considered tardy from the designated class start time through the first 15 minutes of class. After that you will be counted absent. |
|   |   |

**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 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 Larry Andrews at 903.823.3283, or go by the Recruitment, Advisement, and Retention Department located in the Administration building for personal assistance. 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 (1-3 weeks). All students need to use their campus e-mail to receive course related information.

**Basic Needs Security**

Any student who has difficulty affording groceries or accessing enough food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in this course or ability to remain in school, is urge to contact Tonja Blaise, Director of Student Retention, at 903-823-3349 for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable the professor to provide any resources to help you than they may possess.

**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.**

***Current version last updated:***

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.*

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

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Legal Signature

\_**BIOL 1106**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
TC Course Number / Section Number

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