

Syllabus: Biology I for Science Majors - Lecture**Course Number:** BIOL 1306**Semester & Year:** Summer 1 2016**Instructor Information**

Name: Prof. Mark Storey

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Office Hours: none

Textbook Information

- **Required Download - Biology – Openstax Rice University** (FREE downloadable PDF format) <https://openstaxcollege.org/textbooks/biology>
- Recommended Alternative Textbook [Principles of Life. Hillis, Sadava, Heller and Price 1st ed.\(2012\) Sinauer Assoc Inc and W.H. Freeman and Co. ISBN 978-1-4292-5721-3](#)
 - Free textbook website: <http://www.whfreeman.com/hillis1e>

Course Communication

Official communication is through TC student email.

Remind Text Service – Students are required to register for the REMIND text service (Free to use).

See handout for instructions on how to sign up.

Student Learning Outcomes for the Course*At the conclusion of the **lecture portion** of this course students should be able to:*

1. Describe the characteristics of life.
2. Explain the reasoning used by scientists.
3. Identify the basic properties of substances needed for life.
4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
5. Describe the structure of cell membranes and the movement of molecules across a membrane.
6. Identify the substrates, products, and important chemical pathways in metabolism.
7. Identify the principles of inheritance and solve classical genetic problems.
8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.

Student Requirements for Completion of the Course

Lecture Topics/ Exams - Biology 1306 Summer 1 2016

EXAM I

Chapter 1: Principles of Life
Chapter 2: Life Chemistry and Energy
Chapter 3: Nucleic Acids, Proteins and Enzymes
Chapter 4: Cells: The Working Units of Life

EXAM II

Chapter 5: Cell Membranes and Signaling
Chapter 6: Pathways that Harvest and Store Chemical Energy
Chapter 7: The Cell Cycle and Cell Division
Chapter 8: Inheritance, Genes and Chromosomes

EXAM III

Chapter 9: DNA and Its Role in Heredity
Chapter 10: From DNA to Protein: Gene Expression
Chapter 11: Regulation of Gene Expression

FINAL EXAM (Comprehensive) Emphasis on Student Learning Guide Questions Chapters 1-11 and selected essay questions from Exams I, II, and III.

Student Assessment

Three (3) lecture exams will be given over three units and a comprehensive final exam, for a total of four exams. The examination format will include multiple choice, short answer and essay items. Exams will be administered a minimum of one (1) week after being announced. The lecture unit exams will be conducted in the TC testing center.

Course Testing POLICY - TC Testing Center

Lecture Exams are conducted outside of class in the TC Testing Center (TC Library) using the TC LMS (Moodle) and essays are written on paper provided.

The lecture exams are arranged in two parts; **Part I Section A, and Part 1 Section B** (Total of ~70 points) **and must be completed during the same testing session** (no break allowed) on the Moodle Course Management System (TC Online) in the TC testing Center.

Part 1: Section A 40 multiple guess questions (56 points/100)

This part of the exam consists of 40 multiple guess "choice" questions. (each question is valued @ 1.4 points each) This portion is not timed but must be completed in one session, and you only have 1 attempt to complete this 40 question session.

You are also required to take Part I: Section B: 10 questions based on the Chapter Homework Quizzes (10 questions @ 1.4 points = (14 points/100) during the same testing session in the TC testing center.

Part II Essay (~30 points) during a different testing session. All sections of the exam must be completed prior to the exam deadline. I also understand no outside materials (paper, study materials) are allowed to be brought in to the testing center. **There are no makeup exams available for these exams.** **Part II:** Essay/short answer portion of the exam is available by requesting a test booklet from the TC testing center proctor. Write your responses on the test booklet. No outside paper is allowed on this exam. **You are NOT required to take the essays during the same test session as Part I Section A & Section B.**

Active & Cooperative Learning / Bonus Credit Questions: During each lecture class session each student will select a partner to form a student group in order to answer questions within a short time frame (~2 minutes). Your group will receive a “bonus credit” for each question answered correctly. These bonus credits will be converted into bonus points to be awarded to each student’s individual lecture exam (1,2,and 3) score based on a conversion taking into account the performance of the entire class on the exam.

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

| | |
|--------------------------|------|
| Lecture Exams (3) | 50% |
| Final Comprehensive Exam | 20% |
| Online Weekly Quizzes | 20% |
| Participation | 10% |
| Total | 100% |

The participation grade is based on attendance and effort shown. **Twenty (20) points will be deducted for each unexcused absence accrued.**

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 |

Class Schedule

| Topics | Principles of Life 1 / 2 Edition | Biology Openstax Rice Univ. (Green book) |
|---|---|---|
| EXAM I Unit | | |
| Introduction Scientific Method | Chapter 1 Principles of Life | Chapter 1 The Study of Life |
| Basic biological Chemistry | Chapter 2 Life Chemistry and Energy | Chapter 2 The Chemical Foundation of Life Chapter 6 Metabolism |
| Macromolecules and Energy within cells | Chapter 3 Nucleic Acids, Proteins and Enzymes | Chapter 3 Biological Macromolecules Chapter 6 Metabolism |
| Cell anatomy/function | Chapter 4 Cells: The Working Units of Life | Chapter 4 Cell Structure |
| EXAM 1 | | |
| EXAM II Unit | | |
| Cell Membranes | Chapter 5 Cell Membranes and Signaling | Chapter 5 Structure and Function of Plasma Membranes Chapter 9 Cell Communication |
| Cellular Respiration and Photosynthesis | Chapter 6 Pathways that Harvest and Store Chemical Energy | Chapter 7 Cellular Respiration Chapter 8 Photosynthesis |
| Cell Cycle and cell division | Chapter 7 The Cell Cycle and Cell Division | Chapter 10 Cell Reproduction Chapter 11 Meiosis and Sexual Reproduction |
| Genetics | Chapter 8 Inheritance, Genes and Chromosomes | Chapter 12 Mendel's Experiments and Heredity Chapter 13 Modern Understandings of Inheritance |
| Exam 2 | | |
| EXAM III Unit | | |
| DNA Replication | Chapter 9 DNA and its Role in Heredity | Chapter 14 DNA Structure and Function |
| Transcription and Translation | Chapter 10 From DNA to Protein: Gene Expression | Chapter 15 Genes and Proteins |
| Controlling Genetic Expression | Chapter 11 Regulation of Gene Expression | Chapter 16 Gene Expression |

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. (10 minutes after class has begun)

Do not 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.

The maximum number of absences in a M,Tu,Wed,Thurs 5 week summer class is four (2) per semester (the equivalent of two (2) weeks of instruction in a 16 week long semester). The only excused absences are for officially recognized TC student club activities or for Texarkana College official business. **Please Note: Illness and doctor appointments do not qualify as an excused absence.**

EXCUSED ABSENCES (TC Official Policy)

*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.*

WARNING: If you exceed the maximum number of absences for this course you will be dropped (W) from the course. NO EXCEPTIONS.

Students are required to attend lecture classes for the entire period. Students that arrive more than 10 minutes after class has begun or leave early, will be marked as absent. Students that arrive after the door has been closed and 10 minutes after class has begun will be recorded as tardy. **Three tardies will be recorded as an 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.**

If situations make it necessary for missing class you are still responsible for all the work you missed during class. If you miss class, you should let me know ASAP (by TC student e-mail) and in advance if at all possible. I can give you the assignments to help you remain current in 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.

Make-up Policy

No makeups are given for lecture exams in this course. Any portion (multiple choice or essay part) of the exam **cannot** be made up **if it was originally administered in the TC Testing Center.**

Written assignments in lecture 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

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!**

For testing that occurs in my classroom (*testing in the TC testing center is subject to the rules of the testing center*)

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 EXCEPTIONS! 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.

I reserve the right to modify the syllabus at any time during the semester. The online version of this syllabus (TC Online LMS) 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