

Syllabus: Biology for Science Majors I – Lecture Course

Course Number: BIOL 1306 W1 WEB

Semester & Year: Fall 2022 (8/17 – 12/13)

Instructor Information

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Office Hours: (email for an appointment)

Textbook Information

- **Required Download Only- Biology** – Openstax Rice University (**FREE downloadable PDF format**) <https://openstaxcollege.org/textbooks/biology>

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| <ul style="list-style-type: none">• Recommended 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
(This book is <u>not available</u> at the TC bookstore!!! Please DO NOT purchase this book before talking to me first!) |
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Course Communication

Official communication is through TC student email. (myTC web portal)

Technical Requirements & Solutions for this course

A basic level of technical competence and equipment are necessary for participating in this online class. You should already be able to perform the following tasks:

- Attach document files to an e-mail message.
- Complete assignments using (MS Word) word processing software.
- Locate, save, and retrieve files on the computer.
- Send/receive email via your TC student email account.
- Use a web browser like Internet Explorer or Firefox and search engines like Google.

You should have regular, reliable access to software and Internet resources with a modern computer manufactured within the last three years. (access to only a mobile device is NOT enough to succeed in this class).

TC Computer Requirement Policy:

Students are required to have a computer with Internet access for classes. **The computer must be an actual computer** – smart phones, iPads, Androids, etc., are not acceptable substitutes because they lack software compatibility necessary to complete all assignments and tests. Financial costs for the necessary equipment and internet access are the responsibility of the student.

Students needing to purchase a computer may do so through the Texarkana College Bookstore. Systems purchased through the bookstore meet or exceed all requirements, are competitively priced, and may be purchased using financial aid funds. If the system is purchased through another source, it is the student's responsibility to ensure the system meets all requirements.

Computer systems requirements:

- Webcam, microphone, and speakers or headphones
- Windows 10 or a recent version of Mac OS (minimum Sierra). Windows 10 S mode is not supported
- Hardware capable of running Microsoft Teams (free download) and supports multi-media playback
- Support for Chrome or Microsoft Edge – Note: Firefox, Safari, or other browsers may not work on all TC applications
- Able to run Microsoft Office which will be provided free to TC students
- Adobe Reader or another PDF viewer
- Antivirus software such as Windows Defender or another 3rd party anti-virus solution
- The Respondus Lockdown browser is used for taking tests; therefore, the system must be capable of running this software. Most newer systems that meet other specifications should work.

Students should regularly backup content to prevent loss of coursework due to hardware failure. Backup copies of documents and other coursework may be placed on OneDrive cloud storage. OneDrive is included free of charge for all TC students.

A list of Internet service providers can be found on the TC website at:

<https://www.texarkanacollege.edu/coronavirus/>.

LockDown Browser + Webcam Requirement

This course requires the use of *LockDown Browser and a webcam for online exams*. The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

You must use a Mac or Windows computer or iPad device. **Mobile smart phones are NOT supported.**

This is a course requirement (not optional).

Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature.

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Download Instructions

- Select the quiz in the course
- You will see the message "This quiz has been configured so that students may only attempt it using the Respondus LockDown Browser."
- Below this will appear a "Download LockDown Browser" link. Click the button to go to the download page and then follow the instructions
- Download Respondus LockDown Browser to your computer; follow the installation instructions
- Return to the Quiz page in Moodle (it may still be open in another tab)
- Select "Launch LockDown Browser"
- The quiz will now start

Note: LockDown Browser only needs to be installed once to a computer or device. It will start automatically from that point forward when a quiz requires it.

Guidelines

When taking an online quiz, follow these guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and SHOW ME then place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- Run the "Webcam Check" and "System & Network Check" in LockDown Browser, **prior to the exam**
- To produce a good webcam video, do the following:
 - Wear clothing!
 - **Avoid wearing baseball caps or hats with brims**
 - Ensure your computer or device is on a firm surface (a desk or table). **Do NOT** have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
 - If using a built-in webcam, **avoid readjusting the tilt of the screen after the webcam setup is complete**
 - Take the exam in a **well-lit room**, but **avoid backlighting** (such as sitting with your back to a window)
- **Your entire face must be visible throughout the exam session and your audio must be turned on (not muted) or you will receive a zero on the exam.**
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Getting Help

Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- The TC help desks want you to run the "System & Network Check" and the "Webcam Check" before you contact them and be sure to forward the results of these checks at the time of opening

a ticket. Contact the TC Help Desk at **903 -823-3030** or at <https://www.texarkanacollege.edu/helpdesk/> .

- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product
- If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it.

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/ - Biology 1306

EXAM I – (LockDown browser and Webcam Required)

Chapter 1: Principles of Life

Chapter 2: Life Chemistry and Energy

Chapter 3: Nucleic Acids, Proteins and Enzymes

EXAM II - (LockDown browser and Webcam Required)

Chapter 4: Cells: The Working Units of Life

Chapter 5: Cell Membranes and Signaling

Chapter 6: Pathways that Harvest and Store Chemical Energy

EXAM III - (LockDown browser and Webcam Required)

Chapter 7: The Cell Cycle and Cell Division

Chapter 8: Inheritance, Genes and Chromosomes

Chapter 9: DNA and Its Role in Heredity

FINAL EXAM - (LockDown browser and Webcam Required)

(20% of Final) Chapter 10: From DNA to Protein: Gene Expression

(80 % Comprehensive Section) Emphasis on Student Learning Guide Questions Chapters 1- 9

Student Assessment

Three (3) lecture exams will be given over three units and a comprehensive final exam, for a total of **four exams**. (see section above) The examination format will include multiple choice and/or matching items. Exams will be administered according to the course schedule /calendar. The lecture unit exams and the Final course exam will be conducted online using the Respondus LockDown browser and Respondus Monitor to automatically proctor your exams. This is a course requirement and you will be dropped from the course if you cannot take your exam using this system as described.

Course Testing POLICY – Online Exams taken via the TC Online LMS (Moodle) Course page

Lecture Exams are conducted online using TC LMS (Moodle).

The lecture exams are use Multiple Choice and Matching and True/False format; on the Moodle Course Management System (TC Online). These exams are timed exams and **MAY require** the use of the Respondus LockDown Browser + Webcam as described above.

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

Lecture Exams (3)	60%
Final Comprehensive Exam	20%
Chapter Homework Quizzes	20%
Total	100%

Grading Scale

Semester Grade	Course Average
A	89.5-100
B	79.5-89.49
C	69.5-79.49
D	59.5-69.49
F	0-59.49

Class Schedule

Topics	Principles of Life 1 / 2 Edition	Biology Openstax Rice Univ. (Green book)
ENROLLMENT VERIFICATION ACTIVITY DUE BY 11:59 P.M. SUN.. 08/21/2022		
EXAM I Unit		
Introduction Scientific Method	Chapter 1 Principles of Life	Chapter 1 The Study of Life
CH. 1 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN.. 08/28/2022		
Basic biological Chemistry	Chapter 2 Life Chemistry and Energy	Chapter 2 The Chemical Foundation of Life

		Chapter 6 Metabolism
CH. 2 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 09/04/2022		
Macromolecules and Energy within cells	Chapter 3 Nucleic Acids, Proteins and Enzymes	Chapter 3 Biological Macromolecules Chapter 6 Metabolism
CH. 3 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 09/11/2022		
EXAM 1 DUE BY 11:59 P.M. SUN, 09/18/2022	(see Moodle class page)	Via TC Online/Moodle Respondus LD + Web Cam
EXAM II Unit		
Cell anatomy/function	Chapter 4 Cells: The Working Units of Life	Chapter 4 Cell Structure
CH. 4 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 09/25/2022		
Cell Membranes	Chapter 5 Cell Membranes and Signaling	Chapter 5 Structure and Function of Plasma Membranes Chapter 9 Cell Communication
CH. 5 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 10/02/2022		
Cellular Respiration and Photosynthesis	Chapter 6 Pathways that Harvest and Store Chemical Energy	Chapter 7 Cellular Respiration Chapter 8 Photosynthesis
CH. 6 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 10/09, 2022		
EXAM 2 DUE BY 11:59 P.M. SUN, 10/16/2022	(see Moodle class page)	Via TC Online/Moodle Respondus LD + Web Cam
EXAM III Unit		
Cell Cycle and cell division	Chapter 7 The Cell Cycle and Cell Division	Chapter 10 Cell Reproduction Chapter 11 Meiosis and Sexual Reproduction
CH. 7 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 10/23/2022		
Genetics	Chapter 8 Inheritance, Genes and Chromosomes	Chapter 12 Mendel's Experiments and Heredity Chapter 13 Modern Understandings of Inheritance
CH. 8 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 10/30/2022		
DNA Replication	Chapter 9 DNA and its Role in Heredity	Chapter 14 DNA Structure and Function
CH. 9 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 11/6/2022		
EXAM 3 DUE BY 11:59 P.M. SUN, 11/13/2022	(see Moodle class page)	Via TC Online/Moodle Respondus LD + Web Cam
FINAL EXAM Unit		
Transcription and Translation	Chapter 10 From DNA to Protein: Gene Expression	Chapter 15 Genes and Proteins
CH. 10 HOMEWORK QUIZ DUE BY 11:59 P.M. SUN, 11/20/2022		
THANKSGIVING BREAK		
FINAL EXAM DUE BY 11:59 P.M. SUN, 12/04/2022	80% Comprehensive 20% CHAPTER 10 (see Moodle class page)	Via TC Online/Moodle Respondus LD + Web Cam

Absentee Policy

ONLINE COURSE ABSENCES

Absence in an online course is defined as the lack of an active post or submission within the course including required lecture chat window submissions, written assignments and tests. This standard will be used to determine all lecture absentee issues. **All online students must complete an Enrollment Verification activity QUIZ within the first week of class or the professor may drop the student for not having attended.**

The maximum number of absences is four (4) per 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.

WARNING: If you exceed the maximum number of absences for this course you may 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.*

Make-up Policy

No makeups are given for lecture exams in this course.

Written assignments

Lecture assignments are due by the due dates and times indicated in Moodle and will not be accepted late.

Class Conduct

The exam will be conducted online in this course. These exams will be timed and may only be accessed using the *Respondus LockDown browser + Webcam* on the TC Online LMS (Moodle) course page as described previously in the document.

Exams are understood to be taken by the student without the help or assistance from any other person. If students are discovered as having colluded or being aided in violation of the course policies outlined in this syllabus, within the TC Online course page (Moodle LMS) or those of the TC Student Handbook **will receive a zero (0) for the quiz or examination.** **You will also be counted absent for that class session. Further disciplinary action is at the discretion of the instructor.**

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. 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 the Recruitment, Advisement, and Retention Department located in the TC Library 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 financial aid 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

All students need to use their campus e-mail to receive course related information. **Students should check their TC email multiple times per day. The TC Help Desk has instructions on how to setup your smart phone to receive TC student email on your device [here](#).**

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 urged 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 LMS) is the official syllabus and supersedes all versions of this document in print.