**Syllabus:** Concepts of Biology I for *Non- Science Majors* - **LABORATORY**
**Course Number:** **BIOL 1108.W - (Web)**
**Semester & Year:** Web (14 Week format)

**Instructor Information**

 Name: Mark Storey
 Office: Biology (BLGY) Rm. #29
 Telephone: 903-823-3298
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Office Hours: (Please email for an appointment)

**Textbook Information**

 **Required Lab Kit** [www.esciencelabs.com](http://www.esciencelabs.com) **KIT # 1341** This must be purchased at the TC Bookstore

 *(do not purchase a printed lab manual, the lab manual is included inside kit)*

 **Failure to purchase the lab kit will result in the student being dropped from the course.**

**Technical Requirements & Solutions for this WEB lab 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****).*

**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 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
* If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
* To produce a good webcam video, do the following:
	+ **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)
* 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
* **You must record audio and video and your complete FACE must be completely visible in order for the instructor to insure that you the student are following the posted rules for the exam. Failure to do so will result in a minimum of a grade of ZERO for the exam and possibly worse at the discretion of the professor.**

**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* ***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 scientific investigations.

4. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.

5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.

6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.

7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.

8. Identify the importance of karyotypes, pedigrees, and biotechnology.

9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.

10. Analyze evidence for evolution and natural selection.

**Lab Evidence Photos** are due at the conclusion of the lab unit normally SUNDAY evenings before midnight (11:59pm).

**ALL Lab Evidence Photos will be turned in via an Assignment block within the Moodle course page(before deadline). You must submit a minimum of two (2) photos but you should document that you have completed the work assigned for the week by including equipment and show that the work as been completed (not just started).** No email or paper copies of Lab Photos will be accepted for credit).

**Failure to turn in the required minimum of two lab photos will result in the student being counted ABSENT for the week!**

**TURNING IN ASSIGNMENTS and Quizzing**

If you miss a scheduled Lab Quiz the materials that are due **can not be turned in late**.

**Every student must complete an Enrollment Verification activity within the first week of class or the professor may drop a student for not having attended.**

**IMPORTANT**: Be sure to look at your posted grades and attendance record on the course Gradebook located on myTC. If you see any issues, please bring them to my attention ASAP. Be sure to save my reply emails to your email submissions and copies of all correspondence as proof of completing your work if any questions arise later in the semester.

*CAREFUL!! Remember, failure to turn in an assignment (lab evidence photos) each week will result in an absence in the lab course and you only can accrue a maximum of 2 absences.* ***You may be dropped*** *from the course (W) when you are absent for the third time.*

**Student Requirements for Completion of the Course**

**Laboratory Topics/ Exams - Biology 1108.Web**

**The lab units will be completed per the schedule on the BIOL 1108.W Laboratory page on TC Online Course LMS (Moodle)**

**The course grade will be calculated from the following schedule:**

|  |  |
| --- | --- |
| **Unit Quizzes**  | **70%** |
| **Lab Evidence photos \*\*** | **15%** |
| **Lab Workbook Questions and data pages**  | **15%** |
| **Total** | **100%** |

**\*\*Evidence of Lab Unit Completion – REQUIRED!**

In order to document student work on each lab activity two photos of the lab unit being completed AND all pages from the LAB WORKBOOK for all assigned lab units for the week must be submitted via the Assignment block within the weekly Moodle lab page **These photos must include the equipment and supplies from the lab kit**. The photos must be sent via email, no hard copies or other means will be accepted. The deadline for the weekly submission is 11:59PM SUNDAY nights. **A minimum of TWO photos per week must be submitted.(unless noted on assignment)**

**Failure to submit these photos by the deadline will result in the student being counted ABSENT from lab for that week**

**Unit tests will be available for seven (7) days Mon through Sunday, on-line on the weeks indicated in the course schedule.** The tests are randomly generated from a test bank developed for this course. Each of the tests is different--no students will receive the same exam.

When taking a test, be careful not to close the testing window, attempt to open other windows, or try to print the exam. These actions will cause the test to close.

**All major exams require the use of the Respondus LD browser + Web Cam system. You must record audio and video and your complete FACE must be completely visible in order for the instructor to ensure that you the student are following the posted rules for the exam. Failure to do so will result in a minimum of a grade of ZERO for the exam and possibly worse at the discretion of the professor.**

**It is also STRONGLY recommended that you only take exams on a private computer, NOT a workplace computer where pop-up windows and other programs running in the background and firewalls can cause your exam to be terminated early!!**

**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**

**All Lab work in this course (Lab Evidence Photos, Lab Unit Exams and Lab Workbook Data pages with Q&A can not be made up or turned in late in this course.**

**ABSENTEE POLICY**

**Texarkana College’s absentee policy allows instructors to withdraw a student from a course due to excessive absences**

**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**

**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.**

**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: TWO (2).

This LAB course is a **WEB course**, and as such **the student must also complete an Enrollment Verification activity Exam within the first week of class or the student may be dropped for not having attended**.

**ONLINE WEB COURSE ABSENCES**

**Absence in a web 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 laboratory absentee issues***.*

**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.**

**The maximum number of absences in this laboratory class is two (2) per semester (the equivalent of two (2) weeks of instruction).**

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

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

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 yourself 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**

 **There will be a zero tolerance policy for any behavior that is disruptive of online learning.  This includes ANY use of vulgar language or rude behavior toward instructor or any other student in the class via email / phone or online via MS Teams.** 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".

**Any student that has a cell phone or any electronic communications device in their possession during any quiz or examination online will receive a zero (0) for the quiz or examination! You will also be counted absent for that 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, 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 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 TC campus e-mail to receive course related information.

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| **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 that they may possess.**Alternate Operations during Campus Closure** In the event of an emergency or announced campus closure due to a natural disaster or pandemic, Texarkana College may need to move to altered operations and course delivery methods. During this time, Texarkana College may opt to continue delivery of instruction through methods that include, but are not limited to: online learning management system (Jenzabar or Moodle), online conferencing through TEAMS, email messaging, and/or an alternate schedule.  It is the responsibility of the student to monitor Texarkana College's website ([www.texarkanacollege.edu](http://www.texarkanacollege.edu)) for instructions about continuing courses remotely, instructor email notifications on the method of delivery and course-specific communication, and Texarkana College email notifications for important general information. **COVID-19 Online/Virtual Environment Instructional Commitment** The ongoing Covid-19 situation will require that some course materials and instruction are provided through an online and/or virtual format. Even if all or a portion of a class was originally scheduled to meet face to face, social distancing guidelines associated with Covid-19 will limit the number of students who are able to attend face to face classes in person simultaneously. Further, circumstances associated with Covid-19 could cause the college to be forced to shift completely to an online and/or virtual delivery at any time during the semester. While TC faculty members are committed to providing students the option of face to face instruction if possible, students should be prepared to continue their classes in an online and/or virtual environment if necessary. Texarkana College is committed to maintaining engaging, high quality instruction regardless of the delivery format. |

**Course Schedule**

##### **BIOL 1108.W LAB ROADMAP – Spring 2023 (14 Week Course)**

**1/30 – 5/7**

|  |  |
| --- | --- |
| **Weeks / Deadlines** | **Labs, Quizzes, and Exams** |
| **Week 1**; **2/5** | **Required Online Course Enrollment Verification Exam using Respondus Lockdown Browser+ Web Cam** Getting Started Laboratory Safety Unit - ***Submit the completed Lab Safety contract to Prof. Storey before SUN 8/21/22 at 11:59PM.*** |
| Week 2; 2/12 | Complete Chemical Bonding Fundamentals lab unit parts 1,2 and 3 |
| Week 3; 2/19 | Complete The Chemistry of Life - Experiment 1 |
| Week 4; 2/26 | Complete Introduction to the Microscope Experiments 1 and 2 |
| **Week 5**; **3/5** | Complete Cell Structure and Function Experiments 1 and 2**; LAB EXAM 1** |
| Week 6; 3/12**3/13 – 3/19** | Complete Enzymes Lab Experiments 1 and 2**SPRING BREAK** |
| Week 7; 3/26 | Complete Diffusion Lab Experiments 1 and 2 |
| Week 8; 4/2 | Complete Osmosis Lab Experiments 1and 2 |
| **Week 9**; **4/9** | Complete Cellular Respiration Experiments 1 and 2**; LAB EXAM 2** |
| Week 10; 4/16 | Complete Mitosis Lab Experiments 1,2 and 3   |
| Week 11; 4/23 | Complete DNA and RNA Lab Experiments 1,2 and 3 |
| Week 12; 4/30 | Complete Meiosis Lab Experiment Parts 1 and 2 |
| **Week 13; 5/7** | Complete Mendelian Genetics Lab Parts 1,2 and 3**; LAB EXAM 3** |
|  | **LAB COMPLETE (No Final Exam!) 😉** |

**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.**