



Syllabus: Concepts of Biology (Dual Credit)

Course Number: BIOL 1408

Semester & Year: Fall

Instructor Information

Name: Philip Shayne Erwin

Room 109 Linden Kildare High School

Telephone: (903)-756-5314 Ext 4109

E-mail: serwin@lkcisd.net

Office Hours: TBD

Textbook Information

This semester for Concepts of Biology, we will be using an open source textbook developed by Rice University. You can purchase a copy of the textbook at the TC Bookstore, or you can download it as a PDF to your computer, tablet, phone, etc. for free from the Rice OpenStax website.

<http://openstaxcollege.org/textbooks/concepts-of-biology>. Select “Get this Book” in the orange box toward the center of the page and select how you would like to receive the book.

- a) Print-allows you to order a copy from OpenStax. You can also purchase a copy from the TC Bookstore.
- b) PDF-This format can be read on most tablet devices like iPad, Kindle, and most smart phones. You can select high resolution which takes up more space and takes longer to download or lower resolution.
- c) Web View-you can read the book live on the web from your computer or device connected to the Internet. The book does not download.
- d) EPUB-another format for popular mobile devices such as the NOOK.

We will be using the Inquiry into Life laboratory manual by Sylvia Mader (14th edition). It can be purchased from the TC Bookstore. ISBN: 978-0-07-751624-6.

Lecture and Lab Student Learning Outcomes for the Course

1. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
2. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
3. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
4. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
5. Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
6. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
7. Analyze evidence for evolution and natural selection.

Lecture:

Student Requirements for Completion of the Course and Due Dates

Dates are subject to change:

<u>Lecture Exams</u>	<u>Chapters Covered</u>	<u>Date</u>
Exam 1	Chapters 1-2	Week 3
Exam 2	Chapters 3-4	Week 6
Exam 3	Chapters 5-6	Week 9
Exam 4	Chapters 7-8	Week 12
Exam 5	Chapters 9-11	Week 15
Comprehensive Final	Chapters 1-11	Finals Week

Students will be evaluated on a combination of lecture examinations, quizzes, articles and other class assignments, and a comprehensive final examination. All lecture tests may include multiple choice, essay, short answer, and labeling questions.

<u>Week</u>	<u>Material to be covered</u>
1	Go over syllabus; Chapter 1
2	Chapter 2
3	Exam 1; Chapter 3
4	Continue Chapter 3; Chapter 4
5	Chapter 4
6	Exam 2; Chapter 5
7	Chapter 5 and 6
8	Chapter 6
9	Exam 3; Chapter 7
10	Chapter 7 and 8
11	Chapter 8
12	Exam 4; Chapter 9
13	Chapter 9
14	Chapters 10-11
15	Finish Chapter 11; Review; Exam 5
16	Final Exam

This outline is subject to change for reasons of course interest, time constraints, or instructor decision. The exams will be administered on the dates given, unless material relevant for a given exam has not been covered. Under such cases, an exam may be moved a class period or two to aid in the clarity and understanding of the material.

Lab:

Lab Reports and other written assignments in lab are due at the beginning of the class session. Work can be turned in via e-mail to my e-mail address: serwin@lkcisd.net

Student Requirements for Completion of the Course and Due Dates

Dates are subject to change:

<u>Weeks</u>	<u>Units Covered</u>	<u>Quizzes and Exams</u>
Week 1	Scientific Method	
Week 2	Metric System, Microscopes	Lab quiz 1
Week 3	Cell Composition	
Week 4	Cell Structure	Lab Exam 1
Week 5	Cellular Respiration,	
Week 6	Enzymes	Lab quiz 2
Week 7	Photosynthesis	
Week 8	Mitosis	Lab Exam 2
Week 9	Meiosis	
Week 10	Human Genetics	Lab quiz 3
Week 11	Patterns of Inheritance	Lab Exam 3
Week 12	DNA	
Week 13	DNA Technology	Lab quiz 4
THANKSGIVING	NO SCHOOL	
Week 14	Evolution	Lab quiz 5
Week 15	Review	Lab Exam 4
Week 16	FINALS WEEK	

Note: This outline is subject to change for reasons of course interest, time constraint, or instructor decision. The exams will be administered on the dates given, unless material relevant for a given exam has not been covered. Under such cases, an exam may be moved a class period or two to aid in the clarity and understanding of the material.

Student Assessment

Lecture Exams and Final Exam	55%
Weekly Quizzes	10%
Lab Exams	20%
Lab Reports	15%
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

Cell Phone Policy

All cell phones will be turned off and kept out of sight in class. If any phones are out while testing, I will assume you are cheating. There will be no talking on phones or texting while lecture and discussion is taking place. If you cannot abide by this policy, you will be asked to leave.

Student Responsibilities

It is the student's responsibility to know and comply with the instructor's policy and to contact the instructor to make up missed work.

Attendance Policy

Roll will be taken during each class. It is recommended that students contact the instructor if missing a class is necessary. A student with four absences may be dropped from the class for lack of attendance. If an enrolled student stops attending class and chooses to receive an F, the last date they attended will be listed on the final grade sheet and they will most likely have to pay back money received from grants or scholarships. 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.

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.

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.

Academic Classes

A COURSE THAT MEETS FOR THE FULL 16 WEEK SEMESTER	
Class or Lab Meets:	An instructor may withdraw a student from a course if absences exceed:
Once a week (Night classes or Friday classes)	2
Twice a week (MW or TR classes)	4
Three times a week (MWF or TRF classes)	6
Four times a week (MTWR classes)	8
	Three tardies count as one absence

Make-up Policy

Make-up exams should not be required. If any must be administered, they will be worth 75% of the actual score on the exam. Make-up exams may differ in format from the original test. All make-up exams will be recorded as a zero until they are made up. Late work will not be accepted. Quizzes and in-class assignments may not be made up.

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) 823-3450 ext. 3349, 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.

Disclaimer

The above syllabus, policies, schedule, and assignments in this course are subject to change in the event of extenuating circumstances or by mutual agreement between the instructor and the students.

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