TEXARKANA COLLEGE

Syllabus: Biology for Non-Science Majors I Lab

Course Number: BIOL 1108 Semester & Year: Summer I 2015

Instructor Information

Name: Amy Baker-Kireev Lab Classroom: Biology 119

E-mail: Amy.BakerKireev@texarkanacollege.edu Office Hours: Before/after class, or by appointment

Textbook Information

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

Student Learning Outcomes for the Course

- 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. Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
- 9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
- 10. Analyze evidence for evolution and natural selection.

Student Requirements for Completion of the Course and Dates

Dates are subject to change

Dates	Units Covered
Mon., June 8 th	Go over syllabus, Scientific Method (Lab 1)
Tues., June 9 th	Metric System, Microscopes (Lab 2.1 & 2.2)
Wed., June 10 th	Microscopes, Intro. to Cells (Lab 2.4 & 2.5)
Thurs., June 11 th	Intro. to Biochemistry (Lab 3)
Mon., June 15 th	Cells (Lab 4)
Tues., June 16 th	Lab Exam 1
Wed., June 17 th	Enzymes (Lab 6)
Thurs., June 18 th	Cellular Respiration/Fermentation (Lab 7)

Mon., June 22 nd	Photosynthesis Part 1 (Lab 8.1)
Tues., June 23 rd	Photosynthesis Part 2 (Lab 8.2)
Wed., June 24 th	Lab Exam 2
Thurs., June 25 th	Mitosis & Meiosis (Lab 5)
Mon., June 29 th	Genetics (Lab 20)
Tues., June 30 th	Human Genetics (Lab 21)
Wed., July 1 st	Lab Exam 3
Thurs., July 2 nd	DNA Replication, Transcription, & Translation (Lab 22.1-22.3)
Mon., July 6 th	Biotechnology (Lab 22.4 & 22.5)
Tues., July 7 th	Evolution (Lab 23)
Wed., July 8 th	Lab Exam 4, Review
Thurs., July 9 th	Lab Final

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

Students will be evaluated on a combination of tests, quizzes and other class assignments (daily work), and a comprehensive final examination.

Tests may include multiple choice, essay, short answer, true/false, matching, and/or labeling questions.

The following components will determine a student's lab grade:

Tests	50%
Final (Comprehensive)	20%
Daily Work (Quizzes, Class Assignments,	
Participation)	30%

Grade	
A	90-100
В	80-89
C	70-79
D	60-69
F	59-below

Lab notebook entries (daily work) from days when a student was absent may not be made up.

Study guides and supplemental notes/materials will be distributed as handouts in the lab. It is the student's responsibility to keep up with lab handouts.

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 five 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. Mandated program certification requirements detailed for certain programs regarding the maximum allowable unexcused absences takes precedence over the following information.

Academic Classes

A course that meets for 5 weeks of the semester (Summer Sessions)			
Class or lab meets	vithdraw student from		
course if absences exceed			
Three times a week (MTW evening classes)	2 absences		
Four times a week (MTWT day classes)	4 absences		

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.

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.

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.

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.

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.