BRAZOSPORT COLLEGE

SYLLABUS for Spring 2016

General Biology 2 Lab: BIOL 1107

Instructor:Isaiah G. Schauer, Ph.D.Office:Sadler Building 225FOffice phone:230-3123Email:isaiah.schauer.brazosport@gmail.comAlt. phone:230-3225 (Mrs. Debbie Duncan – Admin Office Specialist – Sadler 225K)Virtual Campus:https://online.brazosport.edulogin with BC username & password and
click on the course link for "BIOL1107-ISCHAUER-Supplemental"

This lab is an independent course. It is not tied to lecture; you will receive a separate grade.

Lab Manual: None

All required laboratory materials were developed via collaboration among Brazosport College Life Science Faculty. There will be posted online for you to download, print, and bring to lab with your Pre-Labs complete. Your Instructor will provide you with a web address in Lab 1.

Course Description

General Biology 1107 is a laboratory course which allows you to investigate the structure and function relationships among a wide variety of organisms ranging from microscopic bacteria to fetal swine anatomy. Although many preserved specimens in jars and plastic will be observed and analyzed, other specimens will be dissected for anatomical analysis including: earthworm, starfish, squid, crayfish, frog, perch, shark and fetal pig.

Course Goals

- 1. Students will become familiar with basic biological principles, theories, and terminology and become aware of the vibrant living world in which they live through coordinated laboratory exercises.
- 2. Students will be capable of distinguishing differences between qualitative and quantitative approaches in the Scientific Method, how these approaches differ from other means of inquiry, and will learn how Biologists communicate their findings.
- 3. Students will demonstrate knowledge of the chemical basis of life, basic cellular organization, nature of biological membranes, important biomolecules, cellular enzymes, DNA structure, photosynthesis, and genetics through hands-on lab activities.
- 4. Students will exhibit understanding of the genetic mechanisms underlying patterns of inheritance and phenotypic adaptation within the context of Darwinian evolution and speciation.
- 5. Students will understand the major successes and yet unsolved questions facing modern Biology, including issues that touch upon bioethics.
- 6. Students will develop an awareness of the interdependence of biology and biomedical technology, as well as their influence on and contribution to modern culture.

7. The laboratory course design also provides students majoring in a science with technical and equipment-based knowledge that serves as a basis for further study in biology.

Lab:	Date:	Due:	Lab Topic	
Lab 1	Jan 25	Feb 1	Bacteria & Archaea	
Lab 2	Feb 1	Feb 8	Meet the Protista	
Lab 3	Feb 8	Feb 15	The Furious Fungi	
Lab 4	Feb 15	Feb 22	Sponges & Things-that-stingouch!	
Lab 5	Feb 22	Feb 29	Rotifers & Worms: Earthworm dissection	
Lab 6	Feb 29	Mar 14	Human Tissues	
No Lab Mar 7 th (Campus closed for Spring Break)				
Lab 7	Mar 14	Mar 21	Mollusks & Echinoderms: Starfish & Squid dissections	
Lab 8	Mar 21	Mar 28	Arthropods: Crayfish dissection	
Last day to withdraw from the course is Thursday Mar 24 th				
Lab 9	Mar 28	Apr 4	Amphibians: Frog dissection	
Lab 10	Apr 4	Apr 11	Chordates: Perch & shark dissections	
Lab 11	Apr 11	Apr 18	Mammals: Fetal pig dissection	
Lab 12	Apr 18	Lab Final Exam (study all previous lab quiz questions to prepare)		
No labs remainder of the semester				

Spring 2016 Gen Bio 1107 Lab Schedule

<u>Grading:</u> Course grade will be determined by adding the points you've earned in lab from the following activities:

350 course points maximum:

300 points from lab work and lab quizzes:

15 points per lab report/handout, 15 points per quiz

11 labs required, but only the 10 highest count towards grade

50 points from Lab Final

Questions chosen at random from previous lab quizzes Final is **mandatory**

<u>Grading Scale:</u> Points from lecture and lab will be totaled and your grade determined as follows:

Percentage of points earned	Letter grade
90-100%	Α
80-89%	В
70-79%	С
60-69%	D
59% or less	F

EXTRA CREDIT *may be offered* during the semester. GATOR activities is the typical route for EC points. However, the decisions of when to offer EC, and how many points are offered, are entirely at my discretion.

Lab Mechanics: Lab will consist of a variety of learning methods, including observation, outdoor and fieldtrip activities & documentaries. This collaboration **does not give** students the **license** to copy answers, thoughts, or observations from their lab partners; it simply fosters **working together towards a common goal** (see *Academic Honesty* section for more details on this subject). You must answer all questions for full credit. Each lab is worth 30 points total. The lowest lab is dropped. 350 total points are possible, including the Lab Final Exam. If labs are not turned in on-time, <u>10%</u> of the points are subtracted from your score (or 3 points out of the 30 points possible) for each day it is late. If you miss lab, attend another lab section during the week to make it up. If this isn't possible because it's an emergency, call/email your Instructor ASAP.

Withdrawal policy: The Brazosport College Biology Department and I believe attendance is **critical** for the **comprehension** of material. However, my policy is not to decide whether to withdraw you from my course for lack of attendance. Each student must make the decision to withdraw themselves before the withdraw deadline.

<u>Authority clause and Behavior policy:</u> You are all now considered **adults**, with all the rights, privileges, and responsibilities therein. The College and your instructor will assume that all of you know how to conduct yourself in a respectful, polite, and college-level appropriate behavioral manner. However, **the laboratory is not a democracy - - it is instead an autocracy.** By rank and position, your instructor **retains all control** over maintaining the learning environment. Thus, **disruptive behavior** <u>won't</u> be tolerated in the slightest during lab. This includes, but is not limited to: excessive or loud conversations, inappropriate gestures, inappropriate or insulting conversational topics, bullying or demeaning other students or your instructor, challenging the authority of your instructor on grades, behavior, decisions, lab activities, or anything else that your instructor deems disruptive and distracting to the learning environment. Habitual or repeated disruptive behavior of any type **WILL** result in the **loss of Course points** at my discretion and **may lead to withdrawal** from the course at my discretion.

Academic honesty policy: The College and your instructor will assume that students eligible to perform at the college level are familiar with, and will abide by, the standard rules governing legal and appropriate conduct, especially with regard to academic honesty. Please refer to the Brazosport College Student Guide for more information. This is available online at http://www.brazosport.edu. Briefly, the central principle of academic honesty is that all work presented for a grade by you is yours only and yours alone. Academic dishonesty violates both the policies of this course and the Student Code of Conduct. Each student must do their <u>own work</u> (*meaning not written by someone else or copied from another individual*) on all lab assignments. Academic dishonesty therefore includes, but is not limited to: cheating in any way, plagiarism of published or online material of any kind, and collusion (allowing or enabling a

fellow student to cheat). Let me be crystal clear: Cheating is <u>NOT TOLERATED</u>, under any context, in lab. If you are caught cheating, plagiarizing, colluding to cheat you will be referred to the Dean of Student Services for review and assignment of punishment, which can include an F on the assignment in question, an F in the course, or (in rare cases or repetitive academic dishonesty) suspension. If you are having trouble understanding any concepts or assignments please come to talk to me <u>before</u> your resort to cheating or colluding.

Student services provided by Brazosport College: To contact the Math/Science Division call (979) 230-3225. Information about the College Library is available on the website or by calling (979) 230-3310. The Student Services area provides the following services: Counseling and Advising at (979) 230-3040; Financial Aid at (979) 230-3294; and Student Activities at (979) 230-3355. Tutoring for Math, Reading, Writing, Environmental Science, Chemistry, and other subjects is available in the Student Success Center; please call (979) 230-3527 for more information. Located within the Student Success Center (second floor of the main building above the counseling and registration office) is the BC Writing Center. The Writing Center provides drop-in tutoring Monday – Thursday 9 am – 8 pm and Friday 9 am – noon. However, there are only 2-3 tutors available on any given day, thus you need to plan on going there 4-5 days prior to the assignment due date. Online writing tutor sessions are also offered; an instructional video on this process will be posted on the course website. The Writing Center can assist with brainstorming, organizing and developing paragraphs, understanding professors' directions, learning about APA or other writing styles, learning how to avoid plagiarism, improving mechanics, using Microsoft Word, becoming a stronger writer, and much more. To schedule an Exam, please contact the Testing Services department (formerly the LAC) at (979) 230-3253. Testing schedules are limited so please sign up early. Learning Services is open 7:30 a.m. - 9:30 p.m. Monday-Thursday & 7:30 a.m. - Noon on Fridays, and is located on the 1st floor of the Main building next to Library.

Students with disabilities: Brazosport College is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, at (979) 230-3236 for further information.

<u>Availability of your Instructor on Fridays, Weekends, or Holidays:</u> Unless indicated otherwise by your instructor during class, your instructor is not available by phone or email on Fridays – Weekends – or Holidays. Expect a **return phone call** or **email reply** from your instructor <u>ONLY</u> during standard business hours, Office hours, or hours listed on his Semester schedule posted for each class he teaches on the next business day. (<u>http://www.brazosport.edu/sites/CurrentStudents/Faculty/IsaiahSchauer/Pages/default.aspx</u>) With regard to phone calls, your instructor *only returns calls made by students who leave voicemail messages*.