

BRAZOSPORT COLLEGE

Biol 1107 Tiffany Grothe Syllabus

Instructor Information:

Instructor: Tiffany Grothe M.S.

Email: Tiffany.Grothe@brazosport.edu or ilovebacteria@yahoo.com

Office: HS-225A

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.

Spring 2016 Gen Bio 1107 Lab Schedule

Lab:	Date:	Due:	Lab Topic
Lab 1	Jan 26	Feb 2	Bacteria & Archaea
Lab 2	Feb 2	Feb 9	Meet the Protista
Lab 3	Feb 9	Feb 16	The Furious Fungi
Lab 4	Feb 16	Feb 23	Sponges & Things-that-sting...ouch!
Lab 5	Feb 23	Mar 1	Rotifers & Worms: Earthworm dissection
Lab 6	Mar 1	Mar 15	Human Tissues
No Lab Mar 7 th (Campus closed for Spring Break)			
Lab 7	Mar 15	Mar 22	Mollusks & Echinoderms: Starfish & Squid dissections
Lab 8	Mar 22	Mar 29	Arthropods: Crayfish dissection
Last day to withdraw from the course is Thursday Mar 24 th			
Lab 9	Mar 29	Apr 5	Amphibians: Frog dissection
Lab 10	Apr 5	Apr 12	Chordates: Perch & shark dissections
Lab 11	Apr 12	Apr 19	Mammals: Fetal pig dissection
Lab 12	Apr 19	Lab Final Exam (study all previous lab quiz questions to prepare)	
No labs remainder of the semester			

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

500 course points maximum:

300 points from lab work:

30 points per lab report/handout

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

100 points from quizzes

10 points per quiz

100 points from Lab Final

Questions chosen at random from previous lab quizzes

Final is **mandatory**

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

Percentage of points earned	Letter grade
90-100%	A
80-89%	B
70-79%	C
60-69%	D
59% or less	F

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. 500 total points are possible, including the Lab Final Exam.** If labs are not turned in on-time, **10%** 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, which is **March 24th**.

Academic Honesty: Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information. This is available online at <http://www.brazosport.edu>.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in an F in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

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, 979-230-3236 for further information.