BIOL 1306/1106 Principles of Biology II

INSTRUCTOR CONTACT INFORMATION:

Troy Hibbitts

Room: NB37 or Koch 37 (new name), Brackett Secondary Campus

Email: troy.hibbitts@brackettisd.net (preferred contact)

Conference Period: M-F 2:43-3:35 (8th Period)

LEARNING OBJECTIVES AND NATURE OF THE COURSE: This course introduces the integration between structure and function of biological organization. You will be asked to use processes of science to apply principles of evolution, genetics, diversity, and ecology to living systems. Observation, experimentation, and investigation are emphasized. Biology 1306 requires a conceptual understanding of the material rather than the simple memorization and regurgitation of facts. This course will challenge you to analyze and apply information, solve problems, and make connections different from the context in which they were learned. These are critical skills in biology.

This course is intended for Biology majors and minors or those for which it is a degree requirement. It is not recommended for non-majors to fulfill a general education requirement for a laboratory course.

Co-requisite Courses You must be enrolled in a section of 1106 concurrently with the 1306 lecture. Even though there are two course numbers, we consider these to be one course and you will receive the same letter grade for lecture and lab regardless of your point total in either course alone.

Course Delivery This is a face-to-face course with online components that students are expected to access in Google Classroom.

REQUIRED TEXT AND MATERIALS

Lecture Course Materials (required):

Principles of Life, 2nd Edition, by David M. Hillis, David Sadava, Richard W. Hill, and Mary V. Price, 2014, Sinaur Associtates (AP Required Text)

AP Biology 2016, by Linda Brooke Stabler, Mark Metz, and Paul Gier, Kaplan Publishing.

Lab Course Materials (required):

Access to Google Classroom, Google Sheets, Google Docs

Technology Requirements and Class Preparation

To successfully complete this course, students need to be able to successfully use Google Classroom. All of the material you need to prepare for class is available from Google Classroom: reading assignments for each unit, lecture presentations, homework assignments, in-class activity handouts, helpful handouts (for some concepts), and links to outside review materials (for some concepts).

Communication Class Preparation

You will need to be familiar with and use Google Classroom and your Brackett ISD Email. All course correspondence will be through your Brackett ISD email only. I will do my best to respond to emails within 24 hours during working hours Monday-Friday. Weekend messages may not be returned until Monday.

Office Hours: 8th Period Conference 2:43-3:35 M-F

Lecture: A typical class meeting will combine mini-lectures, discussions, group activities, multimedia presentations, and other demonstrations and activities to give you an opportunity to learn biological concepts in as active a manner as possible. Each segment of the course is structured around one or more conceptual units that can be interpreted or solved by applying selected biological concepts. As a member of the class you are also invited to:

- Ask questions, no matter how naive they seem to you. I will do my best to offer you a satisfactory answer. The only stupid question is one that isn't asked.
- Ask for help and/or clarification. Don't suffer in silence. I can't help you learn if I don't know you're confused or if my instructions are unclear.
- Use your classmates as study partners! Review course material or notes together. Group learning can be powerful and is often beneficial in a course like biology.

COURSE IDEA OBJECTIVES:

- 1. Gain factual knowledge (terminology, classifications, methods, trends)
- 2. Learn fundamental principles and theories
- 3. Learn to apply course material (to improve thinking, problem solving, and decisions)
- 4. Acquire skills in working with others as a member of a team

To achieve course objectives (see additional objectives on the last page of the syllabus) and help maximize your learning, it is vital that you attend class, come prepared, and study the material every day (more about this under student responsibilities).

Methods of Assessing Objectives

We use a "total points" format for determining course grades. The **lecture components** are worth 1425 points. Student Learning Outcomes will be assessed by exams, class participation, lecture activities, and homework assignments. The information below outlines the source of points for each of these components.

Unit Exams – 900 points (9 units at 100 points each)
Unit Review Questions, Activities, and homework - 425 points (9 units for 47 points each)
In class participation/lecture notes/etc – 100 points

The lab components will be worth 1000 points and will be divided into "minor" and "major" lab activities. There will by 7 "major labs" and accompanying lab reports totaling 700 points (100 points each). There will also 10 minor labs totaling 300 points (30 points each).

At the end of the semester, the lecture grade will constitute 75% of the grade, while the lab will constitute 25% of the grade. The two course grades will be reported as a single grade for both courses.

The following grading scale is in use for this course:

A = 90.00-100 points

B = 80.00-89.99 points

C = 70.00-79.99 points

D = 60.00-69.99 points

F = 0-59.99 points (Grades are not rounded up)

Lecture Activities and Homework: All homework assignments will be submitted online. For many assignments, you will be able to work on them at your convenience and get immediate feedback on your learning once they are graded.

Exams. In this course, exams are designed to help you learn. The four exams for this course are noted on the course schedule. All exams, including the final exam are cumulative (i.e. questions on Exam 3 will include material covered on previous exams). Questions typically require interpretation of data and application of concepts rather than rote memory. While emphasis will be placed on material specifically discussed in lectures, exams also include questions covered in other assigned materials, readings and lab.

All grades will be calculated in the same way, regardless of extenuating circumstances or any reason not related to your actual performance in the course. However much I may sympathize with your personal circumstances, I never consider them to be a basis for grade assignments. The activity and homework points serve as an extremely generous, built-in curve. I strongly encourage you to take advantage of them when they become available because once assigned they cannot be made up. Therefore you should always attend class and strive to do your best, so that you may earn the grade you want. It is your responsibility to keep up with your point total. Don't worry I will help you, if you just ask!

*Laboratory: This portion of the course offers you the opportunity to explore and apply concepts to answer research questions. Success in the laboratory involves teamwork in designing and conducting experiments, performing pre-lab and lab activities and report writing. In addition, you will conduct activities designed to develop and improve critical thinking and problem-solving skills related to the topics discussed in lectures. Even though BIOL 1307 and 1107 are different courses, you only get one grade for the combined points for each course (see table above). Your course grade in 1307 will be the letter grade reported for both courses on your transcript.

Student Responsibilities

Attendance: You are expected to attend all scheduled class meetings face-to face. You are expected to arrive on time and stay for the entire period.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Academic Integrity Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU. The College of Science and Engineering adheres to the university's Statement of Academic Integrity.

Accommodations for Students with Disabilities ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation. Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is: Dr. Dallas Swafford Director of Student Disability Services Office of Student Affairs 325-942-2047 dallas.swafford@angelo.edu Houston Harte University Center, Room 112 Incomplete

Grade Policy It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Student Absence for Observance of Religious Holy Days A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Title IX at Angelo State University Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing

all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex. You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: Incident Reporting Form

Face to Face: Mayer Administration Building, Room 210 Phone: 325-942-2022

Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171). For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the Title IX website.