

BIOL 1307/1107

Principles of Biology II



INSTRUCTOR CONTACT INFORMATION:

Dr. Connie Heimann

Office: CAV 017

Email: cheimann@angelo.edu (preferred contact)

Phone: 325-486-6651

Office hours: **Posted on BlackBoard**

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 1307 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 1107 concurrently with the 1307 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 Blackboard.¹

Required Texts and Materials

Lecture Course Materials (required):

1. Brooker, R.J., E.P. Widmaier, L.E. Graham, and P.D. Stiling. 2020. Biology. 5th Edition. McGraw-Hill: NY. With Connect. Options for purchasing the Book with Connect Access Card From the ASU Bookstore or online
 - a. Option 1 eBook with Connect – ISBN: 9781264114573
 - b. Option 2 Loose leaf Book (You get the eBook with Connect-this option is if you want a hard copy – Connect is REQUIRED) – ISBN: 9781260933437

NOTE: with Option 2, if you choose to set up your Connect Access through BlackBoard you will be given the option of purchasing a loose leaf copy of the text book for an additional fee.

2. TopHat Access: TopHat Access (\$22 for 1 semester (4 month) access from ASU Bookstore (ISBN 9780986615108). May be purchased online directly from TopHat for 1 year unlimited (as many classes as necessary) use OR 1 semester unlimited OR 4 years. Each of these options are priced depending on how long you will use it. There are several courses at ASU that use this same service. The online purchase will be more economical over the long run. If you transfer to another university that uses TopHat the account moves with you.
3. A Digital device with wireless capability (cell phone, tablet, laptop). If we go back on online only during the semester, for taking exams, you will need access to a device that allows you to take the exam through the Respondus Lockdown Browser. This course has significant online components. You must be able to access course materials on a daily basis. A laptop is preferred – it will be very difficult to complete most online assignments without a laptop/computer and a reliable wireless source.

Lab Course Materials (required):

1. Heimann, CP and D.P. French. *Investigating Biology: Laboratory Manual to accompany Principles of Biology II*. ISBN 9781644852835 All materials will be provided to you via TopHat. Information regarding purchase of lab manual will be provided during the first week of classes.
2. Microsoft Office 365. You have access to this software as an ASU student. You are expected to complete assignments in both Word and Excel. Use of Word and Excel is not optional. This is the software supported by the university and familiarity with it will serve you well in subsequent courses.

Technology Requirements and Class Preparation

To successfully complete this course, students need to be able to successfully use **Blackboard (Bb), Connect Plus, and TopHat**: Much of your learning about biology must take place outside of the formal class meetings. You should be a frequent visitor to the course Blackboard site (<http://blackboard.angelo.edu>). Please check Bb regularly. All of the material you need to prepare for class is available from the Bb site: 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). If you are a first time Bb user, your password is your ASU PIN (usually your 6-digit birth date unless you have changed it). You can change your password and update your personal information by adding your email address and a telephone number where you can be reached this semester. Many of the homework assignments are available through Bb and link directly to the online homework system Connect Plus.

TopHat: TopHat is a web based platform that allows you to answer questions in class that are projected on your personal device (cell phone, laptop, or tablet). It allows you to check on how you are learning and helps your instructor identify when the class may be doing great or struggling a bit with a concept. We use TopHat because it lets us see how students are doing with a particular concept or idea--in real time! If the class is doing great, we move on to the next subject for the day. If not, it lets us help you learn what you might be struggling with before we move on to the next activity or topic. We also will use it for quizzes in class.

Please register by Friday, August 27, 2021. By end of day on Monday, August 23, you will have received an email from your instructor with instructions for enrolling in their specific TopHat course. If you did not receive this email, please contact your instructor IMMEDIATELY to request the link to the TopHat website. Otherwise, complete the information to use the TopHat Access card from the ASU Bookstore or to pay with a credit card. It is important that you sign up for your lecture instructor's website or you will not be able to participate (and earn points) in class.

Communication

Class Preparation ASU email: Since class announcements will be routinely distributed via email, you will need to regularly check your ASU email account. **Please check you ASU email daily.** All course correspondence will be through your ASU email only (I will not respond to email from other accounts). Please see the email policy in Bb for

more details. ASU provides Internet and email services to you at any of the computer labs on campus. Call 942-2911 to set this up if necessary. 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: If you need to visit with me, you may email me for an appointment Monday-Friday 9-10am . These meetings will be held via telephone or Collaborate at your preference. On MWF from 11-noon and TR from 10-11 I am available for drop ins in my office. Please wear a mask to these hours. If you cannot meet with me during those hours, please suggest an alternative time Monday-Friday 9-5 when I am not in class. My schedule is posted on BlackBoard in the Instructor Information page.

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. You can accumulate up to 200 points toward your final semester grade from unannounced group or individual in-class activities (no make-ups) or homework assignments. We will also use Top Hat questions for in class activities.

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 class mates as study partners! Review exam review questions (on Bb) 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 entire course, both lecture and lab components are worth 1000 points. Student Learning Outcomes will be assessed by exams, tutorials, lecture activities, and laboratory activities. The table below outlines the source of points for each of these components.

Assessment	Maximum Point Contribution to total Grade Total Grade
In-class Activities and homework	200 points
Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Final Exam	200 points
Laboratory*	300 points
Total Points Possible**	1000 points

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

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: A maximum of 200 points is allowed from SmartBook reading assignments, lecture activities, TopHat quizzes and homework; however, there will be opportunities to earn 230-40 of these points. Lecture Activities are NOT attendance points, but you must be present to earn them—there are no make-ups***. Note that these activities constitute 20% of your overall grade. Participation is expected. If you do not earn points on a given assignment, you will have an opportunity to earn them on another, but you are still responsible for the material covered in the assignment. 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. Exam questions will be all objective questions (multiple choice or matching).

Make-Up Exams:

- **No make-up Exams will be given.**
- If you miss one of the first four exams, the final exam will be used to determine a substitute grade for the missed exam. For example, if exam scores are 55, 0, 64, and 105. The missed exam score will be adjusted to “make-up” the missed points. To calculate this, your score on the final exam is divided by the number of points available on the final multiplied by 100. For example, $140/200 * 100 = 70\%$. 70% of 100 (the # of points available on exam 2) is 70 points which would be substituted for your score on exam 2.
- You will only be allowed to “make-up” one exam during the semester by substituting it with a percentage from your final exam. If you miss more than one exam, for any reason, you **will not pass** this course.
- Everyone ***MUST*** take the final exam. You **WILL NOT** pass this course if you miss the final exam.
- **If you have taken exams 1, 2, 3, & 4, the grade on your final exam (if higher than your lowest test score) will be used to replace your lowest exam score as calculated above.** You may replace only one exam score. If you have missed an exam, you do not have this option.

***What do you do if you miss a lecture activity, homework assignment, or group exam assessment?

In the lecture portion of the course, 230 points for lecture activities and homework will be offered, although only 200 points will be used in calculating your grade. We use this as a way for students to accumulate points even if they have to miss a class for ANY reason. Use every opportunity early and throughout the semester to complete these activities to be sure that you will have 200 points by the end of the semester. **No last-minute offers of extra-credit are made in this course, so please don't ask.** It wouldn't be fair to your classmates that have done all the work to earn their grade. Pay your premiums - use the extra-credit opportunities early in the semester!

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. **You must earn a minimum of 60% of the lab points(180 out of 300) to pass the course!! You WILL NOT pass the class if you fail the lab!!**

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. Missed lecture activity points CANNOT be made up. Attendance will be checked at each class meeting via the Top Hat system, please inform me well ahead of time if you will need to be absent for any reason including religious holidays. NOTE: You are NOT automatically dropped if you stop attending class. **November 22** is the last day to drop a course.

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](#)²
- [Angelo State University Catalog](#)³

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](#).⁴

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](#).⁵ 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](#)⁶ 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](#)⁷ 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](#)⁸
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](#).⁹

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)¹⁰ web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

¹ <https://blackboard.angelo.edu/>

² <https://www.angelo.edu/current-students/student-handbook/>

³ <https://www.angelo.edu/academics/catalog/>

⁴ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁵ <https://www.angelo.edu/current-students/disability-services/>

⁶ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁷ <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>

⁸ <https://www.angelo.edu/incident-form>

⁹ <https://www.angelo.edu/title-ix>

¹⁰ <https://www.angelo.edu/covid-19/>