BIOL 1307 - Fall 2020
Principles of Biology II Lecture

Instructor: Dr. Greg Krukonis
Email: gkrukonis@angelo.edu (preferred means of contact)
Office Hours: I will be available via Blackboard Collaborate multiple hours a week. No matter what your schedules are, I will always find a time when we can meet.
Office: On-line only for Fall 2020
Virtual Meeting Space: Blackboard Collaborate

Course Information

Class Meeting Time and Course Delivery

Principles of Biology II - 11416 - BIOL 1307 - D10 will meet online MWF 8:00 – 8:50 AM
We will use the Blackboard Collaborate conferencing system. Attendance during the scheduled times is required.

Principles of Biology II - 11416 - BIOL 1307 – D20 will meet online TR 11:00 AM --12:00 PM
We will use the Blackboard Collaborate conferencing system. Attendance during the scheduled times is required.

Principles of Biology II - 13545 - BIOL 1307 - LA1 will be taught online asynchronously.
Course materials (assignments, recorded lectures, etc.) will be delivered through the Blackboard learning platform. Real-time Q&A sessions (Times TBA) will be conducted using Blackboard Collaborate.

Principles of Biology II - 13558 - BIOL 1307 - BU1 will be taught online asynchronously.
Course materials (assignments, recorded lectures, etc.) will be delivered through the Blackboard learning platform. Real-time Q&A sessions (Times TBA) will be conducted using Blackboard Collaborate.

Course Description
An introduction to the unifying principles of biology with emphasis on biological diversity, evolution, and ecology. Recommended for students majoring in biological sciences or related disciplines. Not intended for non-majors.
Prerequisite and Co-requisite Courses
Students must register for Biology 1307 lecture and 1107 laboratory concurrently. This course is not recommended for non-majors who wish to fulfill a general education requirement for a laboratory course.

Student Learning Outcomes
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. More detailed learning objectives will be provided in the Blackboard course page.

State/SACS Course Objectives
A successful student in Principles of Biology should be able to achieve the following course student learning outcomes:

- describe, explain, and predict natural phenomena using the scientific method= CT1, EQS1, EQS2 – Assessment = In class activities, lecture exams, embedded test questions, lab quizzes, and lab activities/reports
- design an experiment and complete a written description of their design, collaboratively conduct the experiment and analyze data generated to answer some component of a given causal question and defend the reasoning for conclusions drawn in the form of a laboratory report. CS1 – Assessment = In class activities, lab quizzes, and lab activities/reports
- collect and analyze data to evaluate relevant biological/ecological scenarios/problems (i.e. apply information you have learned). EQS1 – Assessment = In class activities, lecture exams, embedded test questions, lab quizzes, and lab activities/reports
- work effectively with others to support and accomplish a shared goal = CS1, TW2 – Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports
- connect what she/he is learning to her/his own field (i.e. to make biology relevant to your own academic endeavors). Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports

Required Texts and Materials
  - Option 1 eBook with CONNECT™– ISBN: 9781260933437
  - Option 2 Loose leaf Book AND CONNECT™ ISBN: 9781260933437
Technology Requirements

- ASU email account and access to Blackboard course site
- Exams will be delivered via Blackboard.
- Computer with reliable internet access. Certain assignments require a computer with a mouse or touchpad. Certain assignments are not compatible with Chromebooks and mobile devices.
- Webcam/microphone.
- Digital camera/scanner app. Must have the ability to take a photo/scan of written work and submit PDF electronic copy. (There are many free options including the Drop Box App)

Communication

Written communication via email is STRONGLY preferred (gkrukonis@angelo.edu). All communication will be exclusively through your ASU email address. Since class announcements, homework, and policy changes will be routinely distributed via email, you will need to regularly check your ASU email account daily.

In your emails to me, always include your full name, ASU ID # and the course name and section number in your subject line. I will respond to email messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday evening.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone and/or Blackboard Collaborate.

Evaluation and Grades

The student learning outcomes will be assessed by exams, tutorials, lecture activities, and the laboratory. Even though BIOL 1307 and 1107 are different courses, you only get one grade for the combined grades for each course (see table above). Your course grade in 1307 will be the letter grade reported for both courses on your transcript.

Course grades will be determined based on combined scores from lecture and lab as indicated in the following table.

<table>
<thead>
<tr>
<th>Assessments*</th>
<th>Percent of Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Activities (CONNECT, TopHat, Homework)</td>
<td>Course Grade</td>
</tr>
<tr>
<td>Lecture Exam 1</td>
<td>10%</td>
</tr>
<tr>
<td>Lecture Exam 2</td>
<td>10%</td>
</tr>
<tr>
<td>Lecture Exam 3</td>
<td>10%</td>
</tr>
<tr>
<td>Lecture Final Exam** (comprehensive)</td>
<td>20%</td>
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<tr>
<td>Laboratory</td>
<td>30%</td>
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Course Total

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<th>100%</th>
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*Various points are assigned to each of these assessment measures and weighted to the percentage indicated.

**The Comprehensive Final Exam (percentage grade) can also replace a lower grade on one of the first three semester lecture exams. See make-up exams below.

Please note: all exams are comprehensive. For example, this means that Exam 3 will cover all material from exam 1, exam 2, as well as new material since those exams were given. *The Comprehensive Final Exam (percentage grade) can also replace a lower grade on one of the first three semester lecture exams. See make-ups below.

Exam 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) and will be given in class or on-line on Blackboard. Exams and Exam Keys, may be reviewed in my office after all students have taken it.

Make-Up Exams:
- No make-up Exams will be given.
- If you miss one of the first three exams, the final exam will be used to determine a substitute grade for the missed exam.
- You will only be allowed to “make-up” one exam during the semester by substituting it with an adjusted 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.

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 = 90-100%
- B = 80.0-89.9%
- C = 70.0-79.9%
- D = 60.0-69.9%
- F = 0-59.9% (Grades are NOT rounded up)
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 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 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!

Assignment and Activity Descriptions
Knowledge of Student Learning Outcomes will be assessed as multiple choice, matching, true/false questions on examinations. Exams will be taken online via Blackboard. Activities will be a mix of various assignment formats including; CONNECT assignments, Blackboard quizzes, worksheets, and other assessment formats. There will be no makeup activity if you miss a deadline. If you fail to turn in an assignment you are still responsible for the material covered in the assignment. No last-minute offers of extra-credit are made in this course. My advice? Get a calendar or calendar app. Enter your assignments and take advantage of opportunities early in the semester.

Laboratory Grades
This LAB portion of the course is critical to your success. This science process skills we teach are applicable across a broad area of science and medicine. Lab offers you the opportunity to explore and apply concepts to answer research questions..

Even though BIOL 1307 and 1107 are different courses, you only get one grade for the combined grades for each course (see table above). Your course grade in 1307 will be the letter grade reported for both courses on your transcript.

Please note: Given the importance of learning these skills, you must earn a minimum of 60% of the lab points to pass the entire course. In other words, you WILL NOT pass the lecture portion of the course if you fail the lab!

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 to disciplinary action and possible expulsion from ASU. The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Class Membership
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 the 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.

Course Objectives

A successful student in Principles of Biology should be able to achieve the following course and state core related learning outcomes:

- describe, explain, and predict natural phenomena using the scientific method = CT1, EQS1, EQS2 – Assessment = In class activities, lecture exams, embedded test questions, lab quizzes, and lab activities/reports
- design an experiment and complete a written description of their design, collaboratively conduct the experiment and analyze data generated to answer some component of a given causal question and defend the reasoning for conclusions drawn in the form of a laboratory report. CS1 – Assessment = In class activities, lab quizzes, and lab activities/reports
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- connect what she/he is learning to her/his own field (i.e. to make biology relevant to your own academic endeavors). Assessment = In class activities, lecture exams, embedded test questions, lab practical exams, and lab activities/reports
Attendance Policy
For students You are expected to attend all scheduled class meetings and come prepared to learn. You are expected to arrive on time and stay for the entire period. You are required to have internet access for the entire course. Accommodations cannot be made for a lack of internet access. NOTE: You are NOT automatically dropped if you stop attending class or completing assignments. November 10th is the last day to drop a course.

WHAT YOU NEED TO DO TO EARN AN A (OR THE GRADE YOU WANT):
The fact that you’re reading this shows that you have the potential to be an “A” student. In fact, I would like for every student in this class to earn an A. Read that again...Shocking, isn’t it? Yes, believe it or not, I want you to do well, and if you’re reading this, I sincerely believe you have the potential to do so in this class. I will do everything in my power to help YOU EARN the grade you want, but you’ll have to do your part too, which means studying for complete understanding every day, attending class and lab, and learning beyond just memorizing the facts.

This course will require effort. Many students after an exam say, “but I knew the material,” or “I even studied for “a bazillion hours,” and are truly bewildered by a grade lower than they anticipated. The problem is that there’s a big difference between understanding something you hear and/or read and knowing it. Understanding is what has to come first, but knowing is beyond even that. Knowing requires being able to, without reference, (1) repeat what you hear/read, accurately and completely, AND (2) use what you’ve heard/read to figure out things you’ve never seen before at all! In other words, using what you know. Don’t let time dictate your studying; let learning. Study until you “learn” the material, no matter how much time it takes.

Also, consider that knowing requires a degree of familiarity and usefulness of the material that cannot occur overnight. Cramming doesn’t work. I suggest you spend “quality time” with biology every day. Also, don’t be deceived by the massive amounts of free time in your schedule. They simply do not exist. The general rule of 3 hours of outside study a week for each hour of course credit is no joke. Such experiences have led to the classification of a person carrying 12 semester hours as a full-time student.

Here are some examples:
- 3 hours of outside study/hr of class x (12 class hours) = a 36-hour workweek outside class + 12 hours in class = a 48 hour week (i.e., College is a full-time job!).
- Or to put it differently, 75% of what you accomplish is done on your own. This may be vastly different from your experience in high school or other courses. Please believe me when I tell you that studying for just 30 minutes before an exam or practical will not work in this course. You, therefore, must accept responsibility for much of your own learning.
• This means for biology; you need to study 12 hours a week! Read that again…Yep, that’s what it takes.
• If you have a part-time job, you are just doubling your workweek. Time management is critical. To study 12 hours a week, we suggest getting a calendar, marking all your exam dates on it, and preparing a weekly schedule of study/play/work time.

So how do I earn an A in this course?
Well, it really is simple, isn’t it? You must come to class, and you must study…for learning. It seems easy enough to say but is often more challenging to put into practice. The feeling of being lost or overwhelmed by the material is not uncommon. Neither are the feelings of uneasiness and frustration. A positive attitude is difficult to maintain when frustration rears up. I am here to help you achieve those goals, so please ask for help.

Okay, okay...So what’s the real way...the bottom line...the trade secret? Well to put it frankly, here are most important strategies you can do to ensure the grade you want are:

1. Get organized. There are lots of moving pieces in this course. Get a calendar and mark your assignment due dates and exam dates. Schedule your study time,
2. Review and Practice Recalling your lecture notes and lab material DAILY for 2-3 hours. Don’t just “read over” your notes. Practice remembering them and that just takes time. I can help with strategies if you ask.
3. Follow all course related instructions.
4. Complete all of your assignments on time.
5. Ask for clarification or help.
6. Get an attitude! Having the right attitude and a mature approach toward learning is important to success in biology. If you are unfamiliar with how to study for a science course, please see me for help or use the study tips posted on Blackboard. Here are just some more tips from those who have traveled this path before you.

STUDY STRATEGIES OF A and B STUDENTS in Principles of Biology

Based on the experiences of successful BIOLOGY students of the past, I have prepared this handout to assist you in your studies. Listed below are the top study strategies of A and B students consistently reported to us in surveys.

1. **Hit the ground Running!** The ferocity of the schedule leaves little wiggle room for procrastination. Assignments are due constantly, so you must get organized and work on lecture and lab assignments immediately. We will always carefully articulate what you need to do to stay on track which leads to point #2 below.
2. **Follow Instructions. Read every Email and Announcement. Do the Assignments.** Yeah, seems pretty obvious, but surprisingly this is where many student fail in college level courses. It is absolutely critical in classes to do these in a timely manner
otherwise it is easy to get lost or get behind fast. Keep track of assignments with a calendar (digital or hand-written). Set reminders on your phone. Do what you can to stay on track!

3. **Some Obvious and Not So Obvious Advice.** Treat the class as a Job. In other words, be professional about it. Make a study plan that works for you. Have dedicated study blocks and stick to them. Eliminate Distractions. Take Breaks. Ask Questions and of course have a dedicated, reliable Wi-Fi.

4. **Review lecture and lab material EVERY DAY.** Research shows if you read your notes for 10-15 minutes a day, you will absolutely do better on your exam than if you didn't. Why? Because you won't have to cram in the end. You will already be familiar with you're the notes you generated from the on-line materials. In addition, you will have discovered early on what you do not understand and can get help well before the exam. *This is by far the most common strategy used by A and B students.* Repetition simply works!

5. **Make Notes then Reorganize and Recopy them** — It's important even in online classes to synthesize and make sense of the material in your own way. That's how learning occurs, so yes you must take notes. Some folks simply recopy material. Others will reorganize them and incorporate information from their text and power points to supplement those. Still, others take notes using the 3-column method. One large central column is used for notes. Two smaller peripheral columns are used for the actual reorganization. One column is used for generating questions, ideas, and comments, the other for the actual reorganization of the notes. People tell me it works. The idea is to spend as much time as possible with the material and to get help with concepts you do not understand early.

6. **Develop the habit of asking questions to yourself.** For example, "What would be a good test question from this material? What don't I understand about this? Do I really get this? What is/are the main idea(s)/process(es)/application(s) of this topic? Why and When do they happen? etc." You'll find that you will begin to anticipate the actual test questions! Good students always ask questions. This shows they are enveloping themselves in the culture of the course and constantly reviewing the material in their minds so that it makes sense. Psychology tells us this is how most people learn...by asking questions.

7. **Manage your time efficiently** and prioritize/schedule your days to include school, work, family, fun, friends, health, and exercise. Calendars are wonderful things, and no student should be without one. We recommend writing down exam dates, etc., from all your courses, so you'll always know what's coming. In addition, it is also helpful to write down your work schedule and or any other important dates. A and B students know how to prioritize, and most tell us they do study 8-10 hours a week for Biology alone. They break the material down into manageable chunks (i.e., a little every day) and don't ever procrastinate.
8. **Make a vocabulary sheet/or flashcards and keep them with you at all times.** Yes, this is just what you did in high school, but it works. Lots of students find that this helps them learn the vocabulary quickly and easily. You can pull them out anywhere and review them. You'll be surprised what you can learn waiting in line for 10 minutes. Remember, you will learn as many new words this semester in biology as you would in a beginning foreign language course (about 3500 or so).

9. **Internalize New Words.** To internalize (learn) a new word, to make it truly part of your vocabulary, you must use the word and use it often. Write it and speak it at every opportunity. Make opportunities to do so. Yes, I just said this, but it is worth mentioning again. Don’t just stare at the diagrams and illustrations in your references; draw on your own…and label them! Test your comprehension and retention by discussing the material. Study in a group. Set up weekly meetings to “go over the notes.” But don’t permit anyone at any time to substitute words like “thingy,” “stuff,” “doodad,” or “dealie” for the proper words required. You’ll defeat the whole purpose of discussion if you do.

10. **The single most important study strategy you can implement in Biology is reviewing and recalling your lecture and lab material every day, especially within 24 hours of going through the content.** Educational studies show that for those students who review and recall their lecture and lab notes every day within 24 hours, earn letter grades 1.5 times higher than those who wait beyond 24 hours to start review and study. There is such a drop in the retention of material if you wait 24 hours to review that it becomes very difficult to master the course with the amount of material we have. This is especially true if you try to cram all the material in the night (or even several days) before a lecture exam or lab practical. How does this work? Basically, there are two causal explanations. One is that you won’t have to cram. You will already be intimately familiar with your notes when the exam arrives. In addition, you will have discovered early on what you do not understand and can get help well before the exam. *Again this is by far the most common strategy used by A and B students.* **REPETITION works**…and…it won’t get done by itself.

**Plagiarism**

Plagiarism is a serious topic covered in ASU’s [Academic Integrity policy](#) in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).
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.

IMPORTANT: I will be happy to make accommodations for you based on the recommendations from the Student Life Office. Please inform me of such accommodations during the first two weeks of class so that we have sufficient time to plan for it. One to two days prior to the exam/quiz is not acceptable. Failure to contact me in advance or adequately plan may result in a less than ideal situation or in the worst case, no accommodation at all.

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.7

The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

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 Procedures8 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 at least one week prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day9 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 Boone, J.D. You may submit reports in the following manner:
Online: www.angelo.edu/incident-form
Face to face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email:michelle.boone@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: www.angelo.edu/title-ix.

This class will be taught in an online format not requiring masks, however the following statement is being included in every Angelo State University syllabus this semester. Remember, when you are around people wear your masks, and make sure they do to.

Required Use of Masks/Facial Coverings by Students

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy
students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

**Modifications to the Syllabus**

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

**Course Schedule**

Tentative schedule of dates, topics, and exams. Order and dates are subject to change.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Week 1-4</td>
<td>Course Tutorial</td>
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<tr>
<td>Unit 1:</td>
<td></td>
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<tr>
<td>• Scientific Thinking</td>
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<tr>
<td>• Lab #1: Intro to Lab and Scientific Method</td>
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<tr>
<td>• Origins of Life</td>
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<tr>
<td>• Lab #2: Size, measurements, and the scale of life</td>
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<tr>
<td>• What is a species?</td>
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<tr>
<td>• Biological classification systems</td>
<td></td>
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<tr>
<td>• Lab #3: Classification</td>
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**EXAM #1 - Deadline Friday 11 September**

<table>
<thead>
<tr>
<th>Week 5-8</th>
<th>Unit 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Diversity of Life – Eukaryotes</td>
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<tr>
<td>• Lab #4: Eukaryote Diversity</td>
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<tr>
<td>• Lab #5 Surface Area to Volume Ratio</td>
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<tr>
<td>• Diversity of Life – Prokaryotes</td>
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<tr>
<td>• Lab #6: Microbes and Microscopes</td>
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**EXAM #2 - Deadline Friday 9 October**
Week 9-12

Unit 3:
- Mechanisms of Change - Mitosis and Meiosis Review
- Intro to Evolution
- Lab #7: Processes of Genetic Change
- Evolution and Population Genetics
- Lab #8: Hardy-Weinberg Equations

EXAM #3 Deadline Friday 6 November

Week 13-14

Unit 4:
- Ecology and Animal Behavior
- Population Ecology
- Species Interactions
- Communities and Ecosystems
- Lab #9: Measuring Species Diversity
- Lab #10: Ecosystems

Week 15

EXAM #4 (Comprehensive Final Exam) Deadline Tuesday 24 November

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1. https://blackboard.angelo.edu
3. https://www.angelo.edu/catalogs/
7. https://www.angelo.edu/services/disability-services/
8. https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
9. https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of
11. https://www.angelo.edu/services/title-ix/
12. https://www.angelo.edu/services/title-ix/