

# BIO 1307.020/050

## Principles of Biology II

### Spring 2021

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#### Instructor: Dr. Russell Wilke

**Email:** [rwilke@angelo.edu](mailto:rwilke@angelo.edu) (preferred contact; please include your full name, ASU ID, and course section)

**Phone:** 325-486-6638

**Office:** CAV 108A (first floor)

**Office Hours:** TR 9-10, W 1:30-3:30, R 2-3:30 and by special appointment. In-person office hours may be moved to outdoor spaces (weather permitting) or to a virtual meeting place. In person visits will be limited to 15 minutes. Masks are encouraged for all meetings.

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#### 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. 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 or necessary for other reasons. It is not recommended for non-majors just to fulfill a general education requirement for a science/laboratory course.*

I expect you to come prepared for class, complete assignments on time, and follow instructions...and of course I also expect you to behave as a responsible adult. You are always invited to ask questions or stop by for a chat! 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 group members 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.

## PLEASE NOTE

- There are separate Blackboard and separate Top Hat Courses for lecture and lab. You will be sent separate invitations to Top Hat for lecture and lab.
- Biology 1307 and 1107 are face-to-face courses with strong online components. We will be meeting physically on campus AND completing course work and assessments online (see the Required Course Materials section of your syllabus for the necessary technology).
- If you are quarantined, please let me know within 24 hours via email so that we may make the appropriate accommodations.

## Prerequisite and Co-requisite Courses

Biology 1307 – Principles of Biology II is a co-requisite with Biology 1107 – Biology Lab. This means you must enroll in both the lecture and the lab to earn credit for each. An overall grade will be calculated and assigned to both the lecture and lab sections. Because the lab is required and a co-requisite of the course, your final grade in lab will be the same as your overall grade in the course. This course is not recommended for non-majors who wish to fulfill a general education requirement for a laboratory course.

## Prerequisite Skills

Accessing Internet websites, Blackboard and Top Hat, using ASU Library resources, and proficiency with Microsoft Word, Excel and/or PowerPoint are expectations of the 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 are provided in the Blackboard course page.

## COURSE IDEA OBJECTIVES:

1. Gain factual knowledge (terminology, classifications, methods, trends)
2. Learn fundamental principles and theories
3. 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).

## Required Texts, Materials, and Technology

- *Encouraged*– Masks
- *Required* - Wi-Fi and broadband internet with access to a desktop or laptop computer with Google Chrome Browser. Note Google Docs, Google Slides, and Google Sheets will not work with class technology. .
- *Required* - Microsoft Office 365. You have free access to this software as an ASU student. You must use the downloaded, not the web, version of this software. You are expected to complete assignments in both Word, Power Point and Excel. Instructions for how to find and install this software will be provided in the Lab Blackboard

- Required - Textbook: Brooker, R.J., E.P. Widmaier, L.E. Graham, and P.D. Stiling. 2020. Biology. 5th Edition. McGraw-Hill: NY. with CONNECT™
  - Option 1 eBook with CONNECT™– ISBN: 9781264114573
  - Option 2 Loose leaf Book AND CONNECT™ 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.
- **Required** - access to <https://blackboard.angelo.com>. Many course materials for lab are located here.
- **Required** - TopHat Access: Information concerning purchasing this service will be provided during the first week of classes. For this REQUIRED program you will need:
  - 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.
  - **NOTE: The JOIN CODE for the 9am MWF class is 764070**
  - **NOTE: The JOIN CODE for the 11 am MWF class is 249787**
  - **You will also receive an email to join the class through Top Hat Monocle.**
  - **This will also require access to a smartphone or tablet**
- **Required**- 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.
- **Required** - ASU email account that you check DAILY. Call the ASU IT Dept if you need one or have forgotten how to access it (325-942-2911)

#### Lab Course Materials (required):

- Heimann, CP and D.P. French. *Investigating Biology: Laboratory Manual to accompany Principles of Biology II*. ISBN 9781644852835. This lab manual is ONLY available via TopHat. It is essentially an online book that allows you to submit assignments and answer questions online. Information regarding purchase of lab manual will be provided during the 1st week of classes.
- 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.

## Course Delivery

This is a face-to-face course with online components that students are expected to access in [Blackboard/Connect and Top Hat](#).<sup>1</sup> Please refer to this [Health and Safety web page](#)<sup>2</sup> for updated information about campus guidelines as they relate to the COVID-19 pandemic.

### 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.

**Class Preparation Blackboard (Bb) and Connect Plus:** 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! We use TopHat in class so that you can answer questions and see the results. 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 the end of the first week of classes.** By Friday of the first week of classes, 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 pay with a credit card. It is important that you sign up for your lecture instructors website or you will not be able to participate (and earn points) in class.

**Class Preparation & ASU email:** Since class announcements will be routinely distributed via email, you will need to regularly check your ASU email account and follow instructions. **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.

**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.

**Use of electronics for non-class related activities:** More and more students are bringing their laptops/tablets, etc. to class to take notes. Sadly, some students use these devices for non-class related activities. Viewing movies, videos, checking social media, etc. can be distracting to other students. This will not be tolerated. You will be given one warning and then asked to leave and points deducted from your grade. You will have to make an appointment with the Student Life Office and me to search for a resolution before you will be allowed re-entry to class.

**Course Groups:** While taking exams is an individual activity, almost all other activities will require your participation with other class members. We will form groups the first week of class. Many of the lecture exercises will be solved collaboratively.

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## Communication

I will respond to email messages within 24 hours during working hours Monday through Friday. Phone message may take up to 48 hours for a response. Holiday and Weekend messages may not be returned until the following Monday or return to classes. In all email include your full name, course number/day/time, and ASU CID #.

**Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line and your full name and ASU CID in the body of the email.

**Virtual communication:** Office hours and/or advising may be done with the assistance of the telephone, Collaborate, Skype, etc. but only by appointment.

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## Evaluation and Grades

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. Lecture grades are combined with lab grades to create an overall course grade which is then assigned to both lecture and lab. Course grades will be determined as indicated in the table below.

**METHODS OF ASSESSING OBJECTIVES:** The student learning outcomes will be assessed by exams, tutorials, lecture activities, and the laboratory.

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* see description below	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)

**In-Class Activities & Homework:** A maximum of 200 points is allowed from lecture activities and both online and offline homework; however, there will be opportunities to earn 230-240 of these points. Lecture Activities are NOT attendance points, but you must be present to earn them since there are no make-ups. (In other words, you can make up the points, but not the individual activity). Note that this constitutes 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 are still responsible for the material covered in the assignment. It also means, I do not accept late work. Pay your premiums - use the extra-credit opportunities early in the semester! 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. Many homework assignments are on-line so that you can work on them at your convenience and get immediate feedback on your learning.

**Exams:** All exams, including the final exam are cumulative. Exams cover material from both LECTURE and LAB. Please refer to the learning goals/objectives on Bb for what to learn for the exams. Questions typically require interpretation of data and application of concepts in addition to factual recall. 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 given on paper, Blackboard, or Top Hat depending on current conditions.

**\*Laboratory:** This portion of the course offers you the opportunity to explore and apply concepts to answer research questions with hands-on learning. 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. Science process skills are so important that **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!!**

#### **Make-Up Exams:**

- **Individual Make-up Exams are not provided.**
- 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 **may not pass** this course.
- Everyone ***MUST*** take the final exam. You **may 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 an In-Class lecture activity or homework assignment?**

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!**

See ASU Operating Policy 10.11 [Grading Procedures](#)<sup>3</sup> for more information.

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## 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](#)<sup>4</sup>
- [Angelo State University Catalog](#)<sup>5</sup>

### Attendance and Drop Date

You are expected to attend all scheduled class meetings. You are expected to arrive on time and stay for the entire period. Missed lecture activity points CANNOT be made up, but you will have the opportunity to make up the points. See make-up policies above. 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. **Tuesday Nov. 22nd is the last day to drop a course.** Please see me first if you intend to drop. It might not be as bad as you think!

### 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. . Students are responsible for understanding the [Academic Honor Code](#) and the ASU policies on academic dishonesty, which is contained in both print and web versions of the Student Handbook. The penalty for ANY act of dishonesty in this class, including any form of cheating or plagiarism: 1) is a grade of ZERO on the assignment and, 2) disciplinary action as warranted in accordance with university guidelines. Please do NOT jeopardize your career; it's not worth it.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).<sup>6</sup>

### 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](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the

[Student Disability Services website](#).<sup>7</sup> 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](mailto:dallas.swafford@angelo.edu)  
Houston Harte University Center, Room 112

## 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](#)<sup>8</sup> for more information.

## Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Miller, J.D.  
Special Assistant to the President and Title IX Coordinator  
Mayer Administration Building, Room 210  
325-486-6357  
[michelle.boone@angelo.edu](mailto:michelle.boone@angelo.edu)

You may also [file a report online](#)<sup>9</sup> 24/7.

If you wish to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information, visit the [Title IX website](#).<sup>10</sup>

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## Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)<sup>11</sup> web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic. Current and ongoing 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, you are encouraged to wear a mask/facial covering and maintain safe distancing practices to the best of your ability.



## 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.

### 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 weekly, 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. 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 college 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 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.**

## Information Sheet–BIOLOGY 1307 – Spring 2021 – R. Wilke

You are required to sign and return this sheet to me by the date indicated in lecture class (must be present to win). By doing so you acknowledge that you have received, read, and understand the syllabus and what is required of you to be successful in this course.

The information contained in this syllabus is your guide to the rules of this course. If you do not understand what is expected of you or the impact of your actions (i.e. missing a class), you should come and see me ASAP (within the first week of class).

YOUR NAME (PRINT): \_\_\_\_\_

(Note: If you prefer to go by your middle name or a nickname, please indicate that in parentheses. Ex. Joseph Student (Joe))

MAJOR: \_\_\_\_\_

Lab Section (day & time): \_\_\_\_\_

Lab Instructor's Name: \_\_\_\_\_

I acknowledge that I have received and accept the responsibility for the information in the class syllabus. **I also acknowledge that I have read and will abide by the ASU Honor Code.**

NAME (signature): \_\_\_\_\_

To receive full credit, answer every question in complete sentences.

1. Tell me why you are here.
2. Describe one thing you are proud of and one thing that is important to you.
3. Read the course description on page 1. Based on those topics, what would you like to learn about this semester?
4. What are your life and career goals?

**BIOL 1307**  
**Principles of Biology II**  
**Fall 2021 Schedule**

# August 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23 First Class Day Syllabus Review	24 Syllabus Review	25 Origin and History of Life	26 Origin and History of Life	27 Diversity of Life Intro.	28
29	30 Diversity of Life/Biological	31 Diversity of Life/Biological				

## Events

**Dr. Wilke's Office Hours**  
**TR 9 – 10**  
**W 130-330**  
**R 2-330**  
**And by appointment**

**Unit 1 Reading Assignments**  
**SmartBook Assignments are**  
**linked on Blackboard.**  
**Chapter 1, Chapter 26,**  
**Chapter 4.1, Chapter 24.1-3,**

**Required Textbooks**  
**Get your Connect and Top Hat**  
**accounts set up by the end of**  
**the first week.**

# September 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Biological Classification	2 Biological Classification	3 Biological Classification	4
5	6 Labor Day No Classes	7 Biological Classification	8 Biological Classification	9 Biological Classification	10 Biological Classification	11
12	13 Biological Classification	14 Exam 1 Review	15 Exam 1 Reveiw	16 Exam 1	17 Exam 1	18
19	20 Diversity of Life - Prokaryotes	21 Diversity of Life - Prokaryotes	22 Diversity of Life - Prokaryotes	23 Diversity of Life - Prokaryotes	24 Diversity of Life - Prokaryotes	25
26	27 Diversity of Life – Eukaryotes	28 Diversity of Life – Eukaryotes	29 Diversity of Life – Eukaryotes	30 Diversity of Life – Eukaryotes		

## Events

Dr. Wilke's Office Hours  
**TR 9 – 10**  
**W 130-330**  
**R 2-330**  
**And by appointment**

Unit 2 Reading Assignments  
**Chapter 4.3**  
**Chapter 27**  
**Chapter 28**

Exam Prep  
**Check out the Tutor Center**  
**for help with preparing for**  
**Exams**

# October 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Diversity of Life – Eukaryotes	2
3	4 Diversity of Life – Eukaryotes	5 Diversity of Life – Eukaryotes	6 Diversity of Life – Eukaryotes (Fungi)	7 Diversity of Life – Eukaryotes	8 Diversity of Life – Eukaryotes	9
10	11 Exam 2 Review	12 Exam 2 Review	13 Exam 2 Review	14 Exam 2	15 Exam 2	16
17	18 Mechanisms of Genetic Change	19 Mechanisms of Genetic Change	20 Mechanisms of Genetic Change	21 Mechanisms of Genetic Change	22 Mechanisms of Genetic Change	23
24	25 Mechanisms of Genetic Change	26 Mechanisms of Genetic Change	27 Mechanisms of Genetic Change	28 Mechanisms of Genetic Change	29 Mechanisms of Genetic Change	30
31						

## Events

Dr. Wilke's Office Hours  
**TR 9 – 10**  
**W 130-330**  
**R 2-330**  
**And by appointment**

Unit 2 Reading Assignments  
**Chapter 31.1 (Plants)**  
**Chapter 29.1 & 4 (Fungi)**  
**Chapter 33.1-2 (Animals)**

Unit 3 Reading Assignments  
**Chapter 16.1, 3-4.**  
**Chapter 22 1-3**  
**Chapter 23**

# November 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Mechanisms of Genetic Change	2 Mechanisms of Genetic Change	3 Mechanisms of Genetic Change	4 Mechanisms of Genetic Change	5 Mechanisms of Genetic Change	6 Mechanisms of Genetic Change
7	8 Exam 3 Review	9 Exam 3 Review	10 Exam 3 Review	11 Exam 3	12 Exam 3	13
14	15 Communities and Ecosystems	16 Communities and Ecosystems	17 Communities and Ecosystems	18 Communities and Ecosystems	19 Communities and Ecosystems	20 Communities and Ecosystems
21	22 Communities and Ecosystems	23 Communities and Ecosystems	24 Thanksgiving Holiday	25 Thanksgiving Holiday	26 Thanksgiving Holiday	27
28	29 Final Exam Review	30 Final Exam Review				

## Events

Dr. Wilke's Office Hours  
**TR 9 – 10**  
**W 130-330**  
**R 2-330**  
**And by appointment**

Unit 3 Reading Assignments  
**Chapter 56.2-3**

Unit 4 Reading Assignments  
**Chapter 55.1, 3-7**  
**Chapter 58.1-2, 5**



# December 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Final Exam Review	2 Final Exam Review	3 Final Exam Review	4
5	6 Final Exam MWF section at 10:30	7 Final Exam TR section at 10:30	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## Events

Dr. Wilke's Office Hours  
**TR 9 – 10**  
**W 130-330**  
**R 2-330**  
**And by appointment**

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- 1 <https://blackboard.angelo.edu/>
  - 2 <https://www.angelo.edu/covid-19/returning-to-campus/health-and-safety.php>
  - 3 <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>
  - 4 <https://www.angelo.edu/current-students/student-handbook/>
  - 5 <https://www.angelo.edu/academics/catalog/>
  - 6 <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>
  - 7 <https://www.angelo.edu/current-students/disability-services/>
  - 8 [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
  - 9 <http://www.angelo.edu/incident-form>
  - 10 <https://www.angelo.edu/title-ix>
  - 11 <https://www.angelo.edu/covid-19/>