

General Biology I – Attributes of Living Systems
BIOL 1306 Section 001 - 3 credits
Texas A&M University San Antonio, College of Arts and Sciences
Spring 2024 Syllabus

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Office hours: MWF after class, Fri 9:50-10:50am Mad 322.

***Class Meeting Times and Location(s):**

Lecture: MWF 9:00 – 9:50am SciTech 279

Textbook for Lecture *REQUIRED***:**

Biology Robert J. Brooker-6th edition McGraw Hill with access to Connect
(Electronic content is available through the bookstore or via the publisher website)

**You may also purchase a loose copy at a special rate from the publisher. This is a great option if you know you will need a physical copy of the text.

Other Required Materials:

- **Lab: MUST BE ENROLLED IN BIOL 1106 LAB CONCURRENTLY (unless already taken)**
- **Blackboard – this is where you will go for lectures, grades, and weekly announcements**
 - Power-point versions of lectures will be posted on Blackboard
 - Announcements regarding lectures or labs may be posted on Blackboard
 - Grades for individual assignments/labs etc... will be posted on Blackboard as we go along.
- **On-Line Learning System Components**
 - We will be using “McGraw Hill Connect” which is an on-line tool for learning and studying modules. You will have access to this via blackboard. It will require a one-time set-up.

Recommended Materials:

- I would **highly suggest** printing out my powerpoint lectures PRIOR TO coming to class
- Take notes **directly on** the printout
- 3-hole punch the notes and organize into a 3-ring binder.

Catalog Description and Prerequisites:

Course Description: This course examines the fundamental molecular, cellular, and genetic principles characterizing living organisms including the role of the scientific method in the discovery of these principles. Specific concepts include the chemical basis for life, energy transformations, cell structure and function, the metabolic processes of respiration and photosynthesis, cell reproduction, and basic concepts of heredity and genetics. This course is designed for students majoring in science fields. This course meets the standards for the life and physical Sciences category of courses under the core curriculum.

Learning Outcomes:

1. Students will develop critical thinking skills, communication skills, and empirical and quantitative skills.

2. Students will understand and apply the scientific method to novel questions in order to develop a strategy to answer those questions.
3. Students will understand the role of the scientific method in scientific discovery.
4. Students will summarize the laws of matter and energy as they apply to living organisms
5. Students will classify the organic and inorganic components that make up living organisms
6. Students will explain the role of water in the fitness of the environment
7. Students will demonstrate an understanding of the differences between eukaryotic and prokaryotic cells.
8. Students will identify components of plant and animal cells, including the structure and function of cell organelles.
9. Students will understand cellular membranes as they relate to transportation of molecules into and out of cells.
10. Students will understand the energy transforming principles of photosynthesis and cellular respiration.
11. Students will understand the cellular cycles of mitosis and meiosis
12. Students will understand the basic principles of gene to protein
13. Students will apply the principles of Mendelian genetics to solution of basic genetics problems to better understand inheritance patterns and be able to discuss how they can contribute to the solution of medical and social dilemmas.
14. Students will be able to discuss recent advances in modern genetics considering the medical, social, and economic impacts of the new findings.

Course Content

5 Regular Exams – (100 points each)

- Each exam will have 35-40 multiple choice questions worth 2 pts each. The remaining points of the exam will be short-answer essays and fill-in-the blanks.
- Exams **will not be scaled**, however you will be informed of the class average on that exam and thus it will give you an idea of your standing in the class (see scaling policy on FINAL GRADES below).
- If you feel that your exam was graded incorrectly, I would be happy to discuss it with you **within 1 week of taking the exam.**

1 Cumulative Final Exam – (125 points)

- The format of the final exam has yet to be determined.

10 Weekly Quizzes – (10 points total for each)

15 SmartBook Assignments – (10 points each)

- On-line homework assignments are a way to guide you through sections of your book and help you to assess whether or not you are understanding the material. These will be completed as per the deadlines listed on the schedule – deadlines are strict so plan ahead to make sure you complete these in time. Only 15 of the 17 will be counted so you can miss 2 without it affecting your grade. If you complete all of them, you will earn the other two as bonus points in this section of the grade.

In-Class Activities –

- There will be hands-on activities and pop quizzes throughout the semester that will help demonstrate concepts, practice word problems, and reinforce concepts that you will be responsible for completing in class.
- These in-class assignments should help assess where you are in terms of the concepts being taught. If you struggle with these activities, this should help identify where you need to focus your studying or where you need to ask for more help.

POLICIES:

Expectations: In college, it is expected that for every credit hour you spend in class, you spend 3 hours working on that material at home. Thus, in the class, it is expected that in addition to coming to class every Monday, Wednesday, and Friday that you also spend 9 hours a week on outside school pertaining to this class. This of course takes time-management skills. Please take this into consideration when planning your semester activities.

Dos & Do Nots

- Do come to class regularly and on time – it affects your grade, not because of points assessed, but because of understanding the material.
- Do take notes on the power point print outs of my lectures
- Do ask questions in class
- Do seek out help from me and your peers
- Do NOT have your cell phone out during class unless asked to do so.
- Do NOT check social media sites on your laptop during my lecture feigning that you are taking notes
- Do NOT come in late or miss class and ask me to be caught up
- Do NOT leave early without talking to me prior to class beginning

ATTENDANCE POLICY:

Lecture Attendance: Attendance will be taken daily however you will not be assessed points. However, keep in mind that attendance may be used at the end of the semester as an additional evaluation of your performance (i.e. if your grade is borderline and you have attended class regularly I will be more inclined to bump you up to the next grade). If you must miss a class, you are responsible for obtaining what you missed (announcements, class notes, handouts, etc...) from a fellow classmate, not me. In which case make a buddy: _____

Exam Day Attendance: Mandatory – If you arrive late, you have only until the end of the period to take it. So, my advice: show up early.

Random Mandatory Attendance: Occasionally there will be a topic, guest speaker, or an activity that will occur in class. These days will be mandatory. You will have prior warning to when these days occur.

MAKE UP POLICIES:

Assignments Because these are on-line and because they will be open and available for more than one day, you should have ample opportunity to complete these. Thus – there are no make-ups. If there is an emergency that is considered a university-excused reason that prevents you from taking a quiz or completing

an assignment in the allotted timeframe, you must contact me **within one day of the due date**. If I do not hear from you within that time period, you have forfeited the right to make up the assignment or quiz.

Quizzes & Exams:

- You may make up an exam only if
 - you contact me within **one** day of the scheduled exam
 - your absence is one approved by TAMUSA policies (illness, death in the family, other immediate-family emergencies). Documentation will be required.
 - Again – if I do not hear from you within 24 hours of the scheduled exam, you have forfeited the right to make up the exam.
 - For quizzes, you may only take the individual portion and it will count twice.

In-class activities – as mentioned above, any hands-on activities we conduct in class cannot be made up as they require your presence and will usually be conducted as a group.

Grading

EXAMS = 55% of your grade (take total points earned / total points available X 0.55) = A

QUIZZES = 20% of your grade (take total points earned / total points available X 0.20) = B

ASSIGNMENTS = 10% of your grade (take total points earned / total points available X 0.10) = C

Final Exam= 15% of your grade (take total points earned / total points available X 0.15) = D

(A + B + C + D) x 100 = FINAL COURSE PERCENTAGE

Final Grade:

A = 90-100%.....I will *consider* scaling up if you earn an 89.7%, but I will **NOT** scale up for an 89.49% or less

B = 80-89%..... I will *consider* scaling up if you earn an 79.7%, but I will **NOT** scale up for an 79.49% or less

C = 70-79%..... I will *consider* scaling up if you earn an 69.7%, but I will **NOT** scale up for an 69.49% or less

D = 60-69%..... I will *consider* scaling up if you earn an 59.7%, but I will **NOT** scale up for an 59.49% or less

F = below 60%

Disability Services and The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disability. If you believe you have a disability that may require accommodations, please contact *Disability Support Services (DSS)* for the coordination of services. DSS is located at the Main Campus on the 2nd floor of the Central Academic Building in room 210. The phone number for DSS is (210) 784-1335 and email is dsupport@tamusa.edu.

Academic Dishonesty is any act, or attempt, which gives an unfair advantage to the student. Academic dishonesty includes, but is not limited to –Plagiarism-Cheating-Lying-Bribery

As a member in an academic community, students at Texas A&M University- San Antonio are expected to exhibit a high level of honesty and integrity in their pursuit of higher education, be mature, be self-directed and be able to manage their own affairs. Students who are unwilling to abide by these basic expectations will find themselves facing academic and/or disciplinary sanctions. Students are expected to share in the responsibility and authority with faculty and staff to challenge and make known acts that violate the Texas A&M University- San Antonio Code of Conduct. Texas A&M University- San Antonio faculty has the discretion to impose grade penalties as deemed necessary and are **obliged to and will report** any form of academic dishonesty. For more information on the process of reported academic misconduct, please refer to <http://www.tamusa.edu/studentengagementsuccess/StudentRightsAndResponsibilities/Academic-Misconduct/index.html> Academic Dishonesty falSB under Acts of Dishonesty in the Student Handbook's Code of Conduct.

Veterans and active duty military personnel are welcomed and encouraged to communicate, in advance if possible, and special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the Patriots' Casa in person room 202, or to contact the *Office of Military Affairs* with any questions at military@tamusa.edu or (210)784-1397

University Email Policy and Course Communications: All correspondence between professors and students must occur via University email accounts. You must have your Jaguar email account ready and working. If it is not working, contact the help desk at sahelp@tamus.edu or at 210-784-HELP (4357). If you don't hear back within 48 hours, contact them again. They have a lot of requests during the first part of the semester, so you may need to follow up with them.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

The Jaguar Writing Center The Jaguar Writing Center provides writing support to graduate and undergraduate students in all three colleges. Writing tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. The Writing Center is currently holding all appointments digitally. Students can schedule appointments with the Writing Center in JagWire under the student services tab. Students wanting to work in realtime with a tutor can schedule an "Online Appointment." Students wishing to receive asynchronous, written feedback from a tutor can schedule an "eTutoring" appointment. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at www.tamusa.edu/Writing-Center. The Writing Center can also be reached by emailing writingcenter@tamusa.edu.

The Academic Learning Center offers free, appointment-based tutoring to Texas A&M University-San Antonio students. The Learning Center is made up of subject-area tutoring for Math and Sciences (including Statistics for most majors). Please call us at **210-784-1332** to see if the ALC offers tutoring for your course. Also, please come visit us in Modular C, Room 140 to learn more about our subject specific hours

Counseling Resources As a college student, there may be time when personal stressors interfere with your academic performance and/or negatively impact your daily functioning. If you or someone you know is experience life stressors, emotional difficulties, or mental health concerns at A&M-SA, please contact the Office of Student Counseling & Wellness Services (SC & WS) located in Modular C Room 166 (Rear entrance) or call 210-784-1331 between the hours of 8:00AM and 5:00PM. All mental health services provided by SC & WS are free, confidential (as the law allows), and are not part of a student's academic or university record.

SC&WS provides brief individual, couples, and group therapy, crisis intervention, consultation, case management, and prevention services. For more information, please visit www.tamusa.edu/studentcounseling.

In a crisis situation, please walk-in to the SC & WS services between 8:00AM and 5:00PM to be seen by a licensed clinician. After hours, please contact UPD at 911 or text "HOME" to 741-741 24/7/365 to connect with a trained crisis counselor. The National Suicide Prevention hotline also offers a 24/7/365 hotline at 1-800-273-8255

COVID-19 is a dangerous illness. Above everything else, your health and safety are our concern. The best estimate now is that 20–40% of people infected with the virus have no symptoms. In compliance with safety practices, students are required to complete the COVID-19 student training course. Upon completion, you will receive a certificate with your name and date of completion. If you have yet to complete the course, please do so immediately, as completion is required to return to campus and participate in the Fall 2020 academic semester.

NOTE: *If you do not complete this training, you will have a Dean of Students hold on your records, which will prevent adds, drops, and registration.*

Students are required to conduct a self-assessment each day before coming to campus to determine if they are exhibiting any signs or symptoms of COVID-19 or have been exposed to COVID-19. Your presence on campus means that you certify that you are not exhibiting any signs or symptoms.

CHECKLIST

If any of the following apply to you, stay home!

1. Have a diagnosis or suspected case of coronavirus;
 2. Are currently exhibiting any of the symptoms associated with COVID-19 as listed on the CDC “Symptoms of Coronavirus” web page <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>—**even one symptom** (e.g., cough or headache);
 3. In the past 14 days have had close (less than six feet) contact with a person who has a lab-confirmed case of COVID-19;
 4. In the past 14 days have had close (less than six feet) contact with a person who is awaiting results of a COVID-19 test because of symptoms or exposure;
 5. In the past 14 days have returned from travel or have traveled through an area with state or local travel restrictions that mandate quarantine upon arrival home.
- Fever or chills (feeling feverish or a measured temperature greater than or equal to 100.0 degrees Fahrenheit)
 - Cough
 - Shortness of breath or difficulty breathing
 - Fatigue
 - Muscle or body aches
 - Headache
 - Loss of taste or smell
 - Sore throat
 - Congestion or runny nose
 - Nausea or vomiting
 - Diarrhea

When in doubt, stay home!

If any of the above apply to you, do NOT come to campus. Instead, contact your professor and the **Dean of Students Office dos@tamusa.edu, office phone: (210) 784-1354.**

All components of this class, including assessments, can be completed virtually, through Blackboard or other platform used in this class. Office hours will be held via Webex or other platform provided by the instructor.

For lecture classes that include a face-to-face component:

Accommodation for missing class if you meet one of the criteria on the checklist or do not feel comfortable physically attending will be made without penalty. Visitors are not allowed, and students can attend class only on their designated day for in-person attendance. All students have a responsibility to ensure they are always contributing to a safe learning environment by following all health and safety protocols.

For laboratory classes that include a face-to-face, hands-on component:

Unlike lecture classes with face-to-face components, laboratories are designed to provide hands-on experience and training in particular skills that are difficult to attain online. Thus, if students are registered for a laboratory course with a face-to-face component, it is expected that they physically attend on their scheduled day. However, if students have a documented health issue, are in another high-risk category, or feel uncomfortable attending in person, they may be able to enroll in a section of the course that is designated OLC (on-line class). If no such section exists, which may occur in upper-division courses, it is imperative that students contact their instructors immediately, and accommodations will be handled on a case-by-case basis. Note: You and your instructor may decide that it’s in your best interest to finish the course at a later date.

Once enrolled in either a hybrid or a fully on-line section, students may not switch between in-person and on-line learning without instructor approval due to the unique nature of preparing for hands-on activities in a laboratory environment as well as tight regulations on the number of students physically allowed in the laboratory. Accommodation for missing class if you meet one of the criteria on the checklist or do not feel comfortable attending will be made without penalty.

While in the classroom:

1. Sanitize your hands upon entering.
2. Always maintain at least six feet from others, including your instructor and other students.
3. Front-row seating will not be used.
4. Sit in designated seats.
5. Always wear a cloth face covering or surgical mask fully covering your mouth and nose at all times while in the classroom, even if alone.
6. Observe and conform to any markings on the floor indicating appropriate spacing and don't sit in a location that has been marked as being off limits.
7. You may ask questions by raising your hand during class or by emailing the instructor outside of class. Do not approach your instructor before or after class to ask a question or attempt to hand your instructor any document or item, as this does not facilitate social distancing.

While in the laboratory: Special laboratory safety instructions will be provided on the course-specific syllabus, and appropriate training will be provided.

Students who do not live up to these responsibilities will not be permitted to physically attend class. Failure to comply with these health and safety protocols is a violation of the Student Code of Conduct. A student who is not in compliance with these health and safety protocols will not be allowed to remain in the classroom and will be reported to the student-conduct office, which may result in the student being barred from the classroom for the remainder of the semester and may also lead to expulsion from the university.

Certain classes may transition to fully online when necessary for health and safety.

