

BIOLOGY
Fall 2025
Michael E. DeBakey High School for Health Professions

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Tutorials and Office Hours: B2 on Fridays.

Welcome to Biology!

Please review all the information in the syllabus. Each student and their parent or guardian must sign and return the last page of the syllabus, acknowledging agreement with the syllabus and its contents.

Course Description:

Biology is the study of the structure, growth, and function of life and living systems. This course will encompass historical contributions to biological concepts; energy production, transfer, and use in living systems; and the interrelatedness of organisms with each other and with environments. Below are the requirements and expectations for this course. You will be responsible at all times for your behavior in this course, and if you choose to deviate in any way from this contract, your actions will directly result in appropriate and immediate consequences.

Biology Syllabus Fall Semester

Textbook: online edition Texas Miller and Levine Biology Student eText

Unit 1: The Nature of Science

Chapter 1: The Science of Biology
Chapter 2: The Chemistry of Life

Unit 2: Energy Flow/ Ecology

Chapter 3: The Biosphere
Chapter 4: Ecosystems & Communities
Chapter 5: Populations
Chapter 6: Humans in the Biosphere

Unit 3: Cells

Chapter 7: Cell structure and Function
Chapter 8: Photosynthesis
Chapter 9: Cellular Respiration & Fermentation
Chapter 10: Cell Growth and Division

Unit 4: Genetics

Chapter 11: Introduction to Genetics
Chapter 12: DNA
Chapter 13: RNA and Protein Synthesis
Chapter 14: The Human Heredity
Chapter 15: Genetic Engineering

***Spring Semester**

Unit 5: Evolution

Chapter 16: Darwin's Theory of Evolution
Chapter 17: Evolution of Populations
Chapter 18: Classification
Chapter 19: History of life

Unit 6: From Microorganisms to Plants

Chapter 20: Viruses and Prokaryotes
Chapter 21: Protists and Fungi
Chapter 22: Introduction to Plants
Chapter 23: Plant Structure and Function
Chapter 24: Plant Reproduction and Response

Unit 7: Animals

Chapter 25: Introduction to Animals
Chapter 26: Animal Evolution and Diversity
Chapter 30: The Human Body

Note: This syllabus may change due to unforeseen circumstances.

Exams, quizzes, and assignments will not be released, but students are welcome to review their answers.

Grading Policy:

Tests / Projects	50%
Quizzes/ Labs /Activities	40%
Daily Work	10%

Each cycle will have a mid cycle exam and an end of cycle exam covering the material from that cycle **and previous cycles**.

Student Expectations:

Students are responsible for reading the chapter prior to class.

For every chapter,

- 1) **Vocabulary words** - Know Definition
- 2) **Notes** - taken and any additional assignment completed, notes must include diagrams
- 3) **Diagrams and tables** - study important diagrams and tables found in the chapter

Students will be assessed via quizzes which will include the chapter to cover that day as well as all previous chapters. These quizzes typically assess reading comprehension and use of vocabulary.

Students are responsible for all vocabulary terms in assigned chapters as well as previous chapters.

Homework\Assignments are due at the beginning of class (No excuses), unless otherwise instructed. Homework and daily work will usually be given credit or no credit based on a student's attempt to complete work accurately. If homework is not done on time or without trying to do it correctly, then quiz and test grades will reflect poor effort.

Students should study for the course a little every night. Students should not feel the need to study an excessive amount the night before a test.

Consequences for choosing to break a rule:

- 1st offense: Verbal warning
- 2nd offense: Personal conference with the teacher; write up
- 3rd offense: Completion of an action plan, telephone call
- 4th offense: Teacher Detention, complete or revise action plan
- 5th offense: Referral to the Dean

Classroom Rules:

1. **Be in your assigned seat when the tardy bell rings (working on warmup). Failure to do so can result in a tardy.**
2. **Bring all materials daily. (No excuses)**
3. **Be courteous and respectful to others in ALL situations.**
4. **Be productive and participate in class.** Participation during lectures, labs, and projects (as well as your attitude) at all times in the classroom play a large role in your grade.
5. **Follow the teacher's directions the FIRST time they are given.** This is extremely important at all times to ensure the most effective and efficient learning possible, and is especially important during laboratory exercises to ensure safety for all persons.

Video recording, audio recording, and photography of any kind is prohibited in the classroom. Cell phone use is prohibited during tests, quizzes, and other assessments. Cell phone use is sometimes allowed during classroom activities.

Supplies: *MUST HAVE SUPPLIES BY THE 2nd day of school

- 1 college rule composition book per semester, 100 pages, no dividers (chronological order)
- 1 pack COLOR Pencils (optional)
- Blue, black, red pens, Pencil, highlighters
- Other supplies may be required for class projects (TBA)

Structure of Course:

This course will move at a rapid pace and if you fail to actively participate for even one class period you will be choosing to increase your risk of failure and/or less than ideal performance. Every student at DeBakey High School is capable of earning a high score in this course. Your grades are not given to you, however, they are earned. Your accomplishments in high school will be a part of your character for the remainder of your life, and I therefore encourage you to take yourself and your actions seriously and always remember to think before you act instead of the other way around.

Homework: Students may be assigned a variety of homework assignments including: videos, virtual labs, and cornell notes. Failure to complete homework typically causes poor performance on quizzes and other assessments. Students may not copy any portion of a homework assignment from another student. Students observed copying homework will receive a "0%" as

will the student having their work copied. All instances of academic dishonesty must be reported to the appropriate assistant principal.

Lectures:

Direct teacher led lectures will typically be short and infrequent. Direct teacher instruction is not the most effective manner to deliver instruction. Lecture time will be more about reviewing information from student reading and discussion of topics that need further attention.

Quizzes:

In class quizzes may not be preceded by direct teacher instruction. Most quizzes will assess comprehension of assigned homework. The results of these quizzes will be one tool that drives instruction in the classroom. This will allow the instructor to focus on areas of most need.

Quizzes may contain both multiple choice questions as well as open-ended questions like fill in the blank, filling out a table, and justification of answers. In both exams and quizzes, **80% of the grade will be calculated using the multiple choice questions, and 20% of the grade will be calculated using the open-ended response.** Students should be prepared to answer many types of questions to be successful.

Labs:

This science course will focus heavily on lab based instruction. Labs will typically be inquiry based, requiring the student to design an experiment to answer a particular question. Participation in lab activities is a privilege not a right. Above all else, safety comes first. Therefore, for the safety of everyone, each student is required to read and/or write up the procedures of the lab assignment BEFORE performing the lab. If a student does not complete the pre-lab assignment, then the student cannot participate in that lab activity. The teacher will provide data to that student so a written lab report can still be completed. However, the maximum grade for the lab report will be a "70%". All labs must be performed properly and safely. If a student is removed from the laboratory for misbehavior, that student will receive an automatic "0%" for the lab grade. In both instances, the teacher will give an alternate in-class assignment to the student during the lab activity. Students will not leave the lab until all supplies are cleaned and returned to their original place. Students are encouraged to practice effective time management and begin cleaning up approximately 10 minutes before the class period is over. If missed due to absence or incomplete prelab, some (not all) labs may be made up during after school tutorials by prior arrangement with me. Due to the nature of many labs, an alternative lab assignment may be necessary in some cases if a lab is missed. Lab reports are to be individually written, **only the data may be shared** among partners. Lab reports should not be plagiarized! If found to be plagiarized, the assignment will receive an automatic "0%" for the lab grade and the students (**both the one copied from and the student who copied**) will be referred to the office for cheating. The lab may NOT be redone for 70%.

Tests:

Students will always be given adequate notice that a test will take place. Tests may assess any material covered up until the day of the test. Due to the nature of this course, it is often necessary to include previous information on tests in addition to the most recently covered material. Tests will typically have two sections: Multiple choice and free response. Students should manage their time during this course to prevent the need for excessive study the night before a test.

Exams will contain both multiple choice questions as well as open-ended questions like fill in the blank, filling out a table, and justification of answers. **In both exams and quizzes, 80% of the grade will be calculated using the multiple choice questions, and 20% of the grade will be calculated using the open-ended response.** Students should be prepared to answer many types of questions to be successful.

Projects

Projects will be assigned approximately one per cycle (3 per semester). These may include presentation of the project to the class as part of the grade. A project grade is a major grade and is equivalent to a test grade. Most project work will be done outside of the class period. Projects are subject to the late policy: Late work will be accepted one class late for a maximum grade of 70% of the original possible points. The written or turned in part of a project may be due before the scheduled presentation (if applicable).

Absences:

If you are absent for any reason, you will have three school days to make up the work at which time it will become a zero if not turned in. Missed labs will require makeup during tutorial time. Makeup tests will be arranged with the instructor.

Projects must be turned in on the day they are due, even if the student is absent. If a student is absent, arrangements should be made to have the project brought to the school or it will be considered late.

Assignments:

Label all assignments in the upper left-hand corner as indicated: First name Last name, Period, Date
Electronic submissions should have the format: Last name_First name _class period_title

Academic Dishonesty:

Academic dishonesty takes many forms and can sometimes be confusing for students and parents. Some forms of academic dishonesty include but are not limited to: Plagiarism, falsification of data, providing false information to an instructor including excuses for late work or falsely claiming to have submitted work, **any form of cheating** in which a student has an unfair advantage on an assessment by using notes or other materials not allowed by the instructor, providing unauthorized assistance or information to others on homework, projects, tests, quizzes, etc., intentionally preventing other students from completing their work, impersonating another student to give them unauthorized assistance. This is not a comprehensive list and teacher and administrator discretion will ultimately decide whether a student has committed an offense. **Copying homework, assignments or lab reports is plagiarism! Only primary lab data may be shared, and with your partner's consent. All other parts of Lab Write Ups must be original work, including methods and calculations! At no time is it allowed to copy directly from the internet or another source for any work submitted for a grade, including definitions. That is plagiarism. Even if sentences are paraphrased using the same wording and changing from full sentences to phrases, it is plagiarism. All answers must be original work. This means do not copy from Wikipedia or other sources, put definitions/concepts in your own words.** A "0%" given for academic dishonesty cannot be redone or retaken.

Turnitin.com is a website that checks student work for plagiarism and other forms of academic dishonesty. It is not a site trying to punish students but rather, encourage original work and prevent accidental and unintended plagiarism. Many assignments will be submitted through turnitin.com.

Academic dishonesty will be reported to the administration and action will be taken according to the school's policy.

Retakes

If the student fails a test or project, then the student has an opportunity to retake a similar assessment covering the same topics or redo the project. All retakes will take place outside of regular class time, usually on THURSDAYS. Once complete, the student's retake will be no higher than "70%". **Please note: There are no retakes for end of cycle exams or quizzes.**

Late Work

Projects, lab reports, and homework may be turned in **ONE class period** late at the beginning of the period and will receive a **70%**. No late work will be accepted beyond that time and the assignment will be marked as a zero.

Start of class/ Tardy:

If you are not seated in your assigned seat and beginning the 'bell ringer' when the bell rings, you are subject to receive a tardy.

Leaving the classroom:

You are allowed to leave the classroom with my permission, but **not during a quiz or a test**. Additionally, if I feel you are abusing this privilege, your departure will count as one tardy. If you need to leave, fill in the hall pass sign-out with your full name, destination, and departure time. Upon your return, enter the time in and sit down quietly. Only one student will be allowed to leave the room at one time. If the student is gone for an excessive amount of time or fails to sign out, they will lose the hall pass privilege for the remainder of the semester. This policy may change depending on classroom behavior and abuse of the privilege. Please take care of any personal needs during the passing period.

Fire Alarm / Fire Drill:

At the sound of the bell, push in your chair and line up at the door and do not talk. Stay in a silent single-file line until we reach our destination in the parking lot. At this time you may quietly talk to your friends while the roster is checked. If you fail to follow these directions you will automatically receive an "S" in conduct for the 1st offense. If you continue to act inappropriately, you will receive a "P" in conduct following your second offense and will additionally be sent to the principal's office. **If you are out of the room** when the alarm sounds, **use the closest exit and report to an administrator**. Do not try to rejoin the class unless it is out the closest exit from where you are.

Internet/Online assignments

Routinely, assignments will be done and submitted online. Students will need to sign in to their own account (to be shown in class.) Deadlines are designated and individual grades are taken. Note that most assignments cannot be redone and the first submission of work is what is graded. If necessary, computers and online access is usually available before and after school and at lunch in the library.

Tutoring/Conferences

Teachers are available for classroom tutoring either during scheduled tutorials, or by appointment. The conference period is B2 or by appointment. Students failing the class are responsible for attending tutorials.

Phone policy

Cell Phones and Electronic Devices Cell phones and electronic devices can be used before school, during the lunch period, and after school. If given permission by a teacher or an administrator, cell phones can be used in classrooms. Cell phones and other electronic devices must be silenced, and stored in lockers, backpacks or purses. Phones and other devices heard or used at undesignated times will be confiscated by DeBakey faculty or administration. Cell phones and other electronic devices are prohibited from testing sites. If a student possesses a cell phone or other electronic device, during any assessment, the student will receive a zero on that assessment.

IMPORTANT: If a student uses a phone during testing, the consequences for cheating will apply. Students who possess cell phones during state and national testing will have their exams voided. **Infraction Consequences**

1 st • Discipline referral to the assistant principal • \$15 administrative fee • 1-hour detention after school (Thursday)

2 nd • Discipline referral to the assistant principal • \$15 administrative fee • 1-hour detention after school (Thursday) • Growth plan

3 rd • Discipline referral to the assistant principal • \$15 administrative fee • 1-hour detention after school (Thursday) • Disciplinary probation

4 th • Discipline referral to the assistant principal • \$15 administrative fee • 1-hour detention after school (Thursday) • Transfer non-renewal recommendation *Students exited from DeBakey due to conduct are not allowed to return to campus or participate in DeBakey events.