

Pre-AP Biology

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Course Description*:

In Biology, students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Biology study a variety of topics that include: structures and functions of cells and viruses; growth and development of organisms; cells, tissues, and organs; nucleic acids and genetics; biological evolution; taxonomy; metabolism and energy transfers in living organisms; living systems; homeostasis; and ecosystems and the environment.

*Source: Chapter 112.34.b. Texas Essential Knowledge and Skills for Science, Subchapter C. High School

Course Objectives*:

At the end of the course, each student will be able to –

- conduct laboratory/ field investigations using safe, environmentally appropriate, & ethical practices;
- use scientific methods & equipment during laboratory & field investigations;
- use critical thinking, scientific reasoning, & problem solving to make informed decisions within & outside the classroom;
- know that cells are the basic structures of all living things with specialized parts that perform specific functions & that viruses are different from cells;
- know how an organism grows & the importance of cell differentiation;
- know the mechanisms of genetics, including the role of nucleic acids & the principles of Mendelian Genetics;
- know evolutionary theory is a scientific explanation for the unity & diversity of life;
- know that taxonomy is a branching classification based on the shared characteristics of organisms & can change as new discoveries are made;
- know the significance of various molecules involved in metabolic processes & energy conversions that occur in living organisms;
- know that biological systems are composed of multiple levels;
- know that biological systems work to achieve & maintain balance;
- know that interdependence & interactions occur within an environmental system.

*Source: Chapter 112.34.c. Texas Essential Knowledge and Skills for Science, Subchapter C. High School

Topic Coverage:

<ul style="list-style-type: none">• Safety• Scientific Method• Ecology and Ecosystems• Biochemistry• Cell Structure and Function	<ul style="list-style-type: none">• Cell Reproduction• Cellular Energetics• Molecular Genetics• Heredity• Evolution	<ul style="list-style-type: none">• Diversity and Classification• Microorganisms & Fungi• Plant / Animal Structure and Function• Human Systems
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Classroom Rules and Requirements:

- 1) Be courteous to others.
- 2) Be prepared with all needed supplies and work.
- 3) Be on time and on task.
- 4) Always asked if something is not clear.

Consequences:

- 1) Verbal warning.
- 2) Personal conference with teacher.
- 3) Lunch or after school classroom detention.
- 4) Parent/teacher/student conference.
- 5) Referral to Principal.

Absences: Students are expected to attend class every day. If you are absent, it is your responsibility to promptly gather the assignments that you missed. The teacher will not remind you of missed assignments, you must take the initiative to find out what you missed. If you miss a test, **YOU** must schedule a re-test during lunch, but keep in mind that the format of the re-test is at the teacher's discretion. It is your responsibility to reschedule your missed test in a timely manner. Please do not disturb the teacher during class to get missed assignments, wait for a quiet time or come by outside of class time.

Late Work: All assignments are due ON TIME. Late work will be accepted up to one day late and no later. The highest possible grade on late work is 70%. If you are on campus the day an assignment is due, then you are required to turn it in, even if you miss your biology period. It is your responsibility to come to me to turn in your work even if you leave early or arrive late. If you turn in an assignment late, you will be asked to fill out and attach an 'action plan' in order to turn in the late assignment. Major assignments must have a parent signature on the action plan.

Tutorials: Mrs. Matsu is always available to help students better understand information in a small group or individually. Tutoring with Mrs. Matsu is available at lunch (before and after school by appointment only). It is highly recommended that if you are having difficulty in this class that you take these opportunities to get help and it will also show Mrs. Matsu that you are taking the initiative to bring up your grade.

Headings: All papers you turn in must include the following:

- 1) Your full name (first and **last**)
- 2) period
- 3) date

Extra Credit: To avoid students coming to the teacher the last few days of the nine weeks asking for extra credit to bring their grade up, extra credit opportunities will be offered throughout the semester. It is your responsibility to initiate extra credit. Extra credit projects will not be accepted the last week of each grading period. There is one way to earn extra credit: (other opportunities may arise)

- 1) You may take any of the information covered in the grading period (9 weeks) and develop a creative approach to illustrate mastery. The two key words are "creative" and "mastery". You may choose whatever format or approach you like, but keep in mind the more creative, accurate, and impressive your work, the better the grade. (Maximum of 10 point added to a single test grade)

Academic Integrity: Cheating, copying, and plagiarizing will not be tolerated in this course. Any student displaying academic dishonesty will face the full consequences of their actions. In like manner, the student will receive a "P" in conduct and a **zero** on the assignment. There will *not* be an opportunity to make up the assignment.

Detention: The procedures for this class are clearly stated in this course guideline and are expected to be followed at all times. If you fail to follow these procedures or are disrupting the classroom, you will be given a personal detention by Mrs. Matsu. You will be required to spend *at least* 30 minutes at lunch cleaning up the classroom, lab stations, equipment, etc... Once you have been assigned detention, you will have three school days in which to serve your detention. You must inform Mrs. Matsu after class as to which day you will serve your detention.

Conduct grades: Conduct grades are a reflection of the students' positive and negative behavior. To earn an "E" the student must participate on a regular basis and follow class procedures. Participation is necessary for class. Participation should be meaningful and add to discussion, not detract.

Anything else: Anything not covered here will be subject to the instructions and rules in the Student handbook and/or the teacher's discretion.

PROCEDURES:

- 1) Come into class quietly, sit in your seat, and immediately begin working on the Bellringer. Do not wait for the bell to ring. The bell doesn't begin class, you do!
- 2) Tardiness is **not acceptable!** You must be in your seat when the bell rings or you will be considered tardy. After three tardies, a student will be assigned detention.
- 3) You may not eat or drink anything but water during class.
- 4) Ipods, mp3 players, cell phones and other electronic devices should never be used, seen, or heard during class. If they are disruptive (make noise or are used) they will be taken up and given to the school police officer.
- 5) Students should always remain in their assigned seat unless they have specific permission from the teacher to be out of their seat. Please take care of all personal business before entering the classroom. Visits to lockers, going to the restroom, sharpening pencils, throwing away trash, borrowing materials, etc... should be done before class begins. You have 5 minutes between classes, use them wisely.
- 6) Only one person may be out of the classroom at a time. Please get permission when you need to leave the classroom for any reason and take the hall pass with you. Return within 3 minutes! Do not abuse this privilege or it will be taken away from you.
- 7) Always raise your hand and be recognized by the teacher before speaking. Do not interrupt other students or the teacher, simply raise your hand and wait your turn.
- 8) Students will be expected to actively participate in all tasks and discussions in the classroom. This means asking questions, contributing answers, and playing an active role in lab activities.
- 9) Students should always bring appropriate materials to class. Everyday, no matter what, you will need your binder and a pen. Always bring extra pens, pencils, and paper to be prepared for an emergency. You will be told in advance about any special materials you may need for the following class session. Be sure to take all your materials with you when you leave, Mrs. Matsu cannot be held responsible for any personal belongings that are left in the classroom.
- 10) Students will be expected to keep an assignment planner/notebook. Each day after finishing the Bellringer, students should record any homework assignments or test schedules off of the white board into their assignment notebook.
- 11) The bell does not dismiss you, the teacher does. Enough said! Do not begin to pack up your belongings in anticipation of the bell.
- 12) Keep your desk, lab stations, and surrounding areas clean. All sinks should be kept free of trash. All individuals at a particular lab station will be penalized (points deducted off the lab) for a lab station that is not clean at the end of class.
- 13) You may use a pencil or pen for your notes section, but all work that is to be turned in must be done in blue or black pen. Please try to write neatly and legibly. Work that cannot be read cannot be graded and will be returned as incomplete.
- 14) All major projects are due by 8:20 am of the due date. You will be told in advanced which projects are due at the beginning of the day. If you bus is late, please bring the project to me then proceed to 1st period.
- 15) The dress code is to be strictly observed at all times.
- 16) Always use proper and appropriate language in the classroom.

