

TEMIMA HIGH SCHOOL

AP BIOLOGY 2011-2012

INSTRUCTOR: ELETHIA W. TILLMAN, PH.D.

COURSE DESCRIPTION

This course is designed and taught for high school seniors in a style comparable to that of introductory biology class for college freshmen. You should be proud of yourself for having the courage to take on this task. This course will be both challenging and rewarding at the same time. You will learn a great amount of information regarding the biology of the world around you and within you, the history of the basic foundations of accepted scientific theories and concepts and how these ideas relate to our society today. Scientific theories are constantly questioned, amended, confirmed, etc. Therefore, consider yourself immersed into the world of science; a place where we will discover science as a process through exploration, investigation, and critical evaluation of fundamental scientific concepts.

AP Biology is designed to

- Give you the experience of a college-level curriculum;
- Provide you with an opportunity to learn the information and laboratory skills of a college introductory-level biology course;
- Help you develop the types of study skills that are necessary for success in any course at the college level;
- Prepare you to be able to demonstrate on the AP Biology Exam the information and concepts you have learned and the skills you have developed.

COURSE GOALS

A major goal of the AP Biology program is to provide you with an understanding of biology as a process rather than to make the course and learning process nothing more than an accumulation of discrete and unrelated facts to be memorized. Everything you will learn in this class is somehow connected and this concept will be a major factor of this course. To facilitate this goal, the AP Biology Development Committee has identified eight major themes intended to assist you in organizing concepts and topics into a coherent conceptual framework.

Major Themes

- **Science As a Process**
Science is a way of knowing. It can involve a discovery process using *inductive reasoning*, or it can be a process of *hypothesis testing*.
 - ❖ *Example: The theory of evolution was developed based on observation and experimentation.*

REQUIRED TEXTS AND MATERIALS

- ***Biology***, AP edition, 8th ed., Campbell and Reese (provided for you)
- ***AP Biology Test Prep***, Campbell and Reese (provided for you)
- **Notebook:** A three-ring binder will serve as an organizational tool for your work. All assignments, writings, quizzes, experiments, lab notes, handouts, etc. will be kept in this binder.
TIP: use tabs (i.e. notes, homework, worksheets, labs, and quizzes/tests) to help you organize
- **Student planner/calendar**
- **Pencils and/or pens will be needed for taking notes in class**

OPTIONAL TEXTS AND MATERIALS

- ***Cliffs AP Biology***
- ***5 Steps to a 5 - AP Biology***
- **Calculator**
- **Colored pencils for illustrations**

COURSE REGULATIONS

Petition for Grade Change

Any requests for adjustment of grades or exam scores must be submitted to me in writing no more than one week after the assignments have been returned. In all cases, **the entire assignment will be reevaluated and a revised grade (higher or lower) will be assigned if warranted.** All grade reassignments are final.

Academic Honesty

At the heart of Temima's mission is spiritual and academic excellence, along with the development of intellectual, ethical and leadership qualities. These goals can only flourish in an institutional environment where everyone affirms honesty, trust, and mutual respect. All students are expected to understand and follow the basic standards of honesty and integrity, upholding a commitment to high ethical standards. Students are expected to read and abide by the Temima Code of Conduct and are expected to behave as mature and responsible members of the Temima academic community. Students are expected to follow ethical standards in their personal conduct and in their behavior towards other members of the community. They are expected to observe basic honesty in their work, words, ideas, and actions. Failure to do so is a violation of the Temima Academic Integrity Policy. Violators will be subject to the sanctions.

I expect you to adhere to the highest standards of academic integrity and honesty. Any incident of academic dishonesty will be reported immediately to Mrs. Feldman and Mrs. Limor.

ABSENCES AND LATE WORK:

Assignments will be accepted no more than 2 days after the due date for full credit only in the case of an **unanticipated, excused** absence. After 2 days, the point value will be reduced by 50%.

If you do not turn in an assignment on time due to unexcused absences, you will earn a **ZERO** for that assignment. Work may be submitted for critique/feedback (but no grade). **No work** will be accepted after 3 days past the due date.

Remember: If you know you will be absent, turn in work before you leave if a due date falls during your absence!!

It is **YOUR RESPONSIBILITY** to turn in assignments before a due date and/or to get make-up work when you return to school.

EVALUATION AND GRADING

Parameter	Percent Total Grade
Exams	30%
Quizzes	20%
Labs and Related Activities	15%
Research Paper/Presentation	15%
Assignments/Homework	20%

	14,15,16	<i>Lab - Genetics of Organisms</i>	
	November 21,22,23	20- DNA Technology <i>Lab - Molecular Biology</i>	
UNIT 4 MECHANISMS OF EVOLUTION	November 28,29,30	22- Descent with Modification 23- Evolution of Populations	Test: Ch 14-20
	December 5,6,7	24-The Origin of Species 25- Early Earth and Origin of Life	
UNIT 5 EVOLUTIONARY HISTORY OF BIOLOGICAL DIVERSITY	December 12,13,14	26- Phylogeny and Tree of Life <i>Lab - Population Genetics and Evolution</i> 27- Bacteria and Archaea/Prokaryotes (home) 28- Protists (home) 31- Fungi (home)	Take home: Ch 27,28,31
UNIT 6 PLANTS	December 19,20,21	29- Plant Evolution 30- Evolution of Seed Plants	Test: 22-26
	December 22-30	NO CLASS- WINTER BREAK	
	January 2,3,4	35-Plant Structure and Growth 36- Transport in Vascular Plants	
	January 9,10,11	37- Soil and Plant Nutrition 39- Plant Responses/Signal Transduction	
	January 16,17,18	38- Angiosperm Reproduction /Biotechnology	Test? 29,30,35-39
	January 23,24,25	NO CLASS – 1st SEMESTER EXAMS	
UNIT 7 ANIMAL FORM AND FUNCTION	January 30,31 February 1	32- Animal Diversity/Evolution 33- Invertebrates	Test? 29,30,35-39
	February 6,7,8	34-Vertebrates 40-Animal Structure and Function	
	February 13,14,15	41- Animal Nutrition	
	February 20,21,22	42- Circulation and Gas Exchange <i>Lab - Physiology of the Circulatory System</i>	
	February 27,28,29	43-Immune System	

Please read and return at the next class.

I, (print student's name) _____, have read and understand the AP Biology course outline presented by Elethia Tillman and am aware that it may change throughout the year. I am also aware of the commitment I have made to this course regarding pace and the significant amount of time I must devote to studying and being prepared. I agree to adhere to all policies and understand that infractions will result in corrective actions deemed appropriate by Temima administrators.

Signature: _____ **Date:** _____
Parent or Guardian of above named student

Signature: _____ **Date:** _____
Student

Parents, please feel free to contact me now or anytime throughout the school year if you have any questions or concerns.

Elethia W. Tillman

678-524-3337