

Pre AP Biology 2016-2017

Course Overview:

Biology is the study of living organisms, their origins, how they survive, reproduce, change over time, and interact with each other and their environments. The Pre-AP Biology curriculum is an introductory course taught in two semesters of high school. The primary objective of the course is to provide students with a fundamental understanding of modern biology and scientific processes, building a foundation for success in the college level AP courses to follow.

Pre-AP Biology is recommended for high-achieving students and for students who have a particular interest in biology and the natural sciences, including students who are traditionally underrepresented in AP courses. Students will be ultimately responsible for their learning; therefore, they should be organized, prepared, and motivated to learn every day.

The Pre-AP Biology curriculum differs from the regular Biology curriculum in meaningful ways. The Pre-AP course places a higher priority on developing critical thinking skills by examining real world problems. The Pre-AP curriculum examines topics with more depth and includes more advanced resource material in addition to the adopted text. Laboratory investigations play a more prominent role in the Pre-AP course. Labs are more sophisticated than in the regular curriculum and students are expected to design and carry out experiments using appropriate methods and resources.

EOC exam will be given during the 6th six weeks. Throughout the year, Benchmarks will be given to make sure you have kept up with concepts. Expect a benchmark every 6 weeks. At the end of the 1st semester, a Benchmark Semester Exam will be given and will count 1/7th of the total semester grade. The 2nd semester exam will then be a comprehensive exam of materials learned in the 4th, 5th and 6th six weeks period and it too will count 1/7th of the total semester grade

Students will learn to -

- Think Critically
- Design scientific Hypotheses & Experiments
- Write good scientific essays
- Conceptualize information, rather than memorize
- Interpret & Analyze scientific data
- Solve problems by using the Scientific Method
- Learn to read informational text for understanding & become a concise note takers

Materials:- Please place your names on these prior to class

- Standard size, loose leaf notebook paper
- Pencils with erasers
- Ink pens including RED
- Map pencils
- 1 inch binder to be left in classroom
- Spiral for 2 or 3 class subject (super important)
- paper towels
- Small Elmer's glue or stick glue
- Small bag (10 pairs) of dissection gloves for late spring semester
- Others as year progresses Others as year progresses

Labs:

Laboratory experimentation and exploration are a large part of this course. It is vital that the students follow all laboratory procedures and safety rules/guidelines. Failure to comply with behavior expectations can result in removal from the lab activities. A safety contract will be sent home and filled out by the student and the parent/guardian. These documents will be kept on file and are needed before a student can participate in any labs.

Grading Policy:

- Major TEST, Major Labs/Reports, Major Projects: 60%
- Quizzes, Minor Labs, Group activities: 30%
- Daily, Homework, Worksheets: 10%

EOC (STARR) Exam will be given during the 6th six weeks. Throughout the year, benchmarks will be given to make sure you have kept up with concepts.

Summer Project:

- To prepare the students for the rigor of the 2016-2017 class year
- To endure the art of research in Ecology and Biology related Job Careers

I. Collage

- a. Create a **Biome Collage Poster** (1/2 size) that depicts **biotic** and **abiotic** factors (words and pictures) of a certain biome. (Do your research) The biomes researched are based on your last name. See the following chart to determine which biome you are to research. These are **North American Biomes**....
 - i. Examples of pictures might include food chains, energy pyramids, food webs, autotrophs, heterotrophs
 - ii. Examples of words/statements might include amount of precipitation, types of autotrophs, heterotrophs, average temperatures etc.

Last Name	Biome to Research
A-C	Tropical Rainforest
D-F	Desert
G-J	Temperate Deciduous Forest
K-M	Temperate Grasslands
N-Q	Tundra
R-S	Taiga
T-V	Temperate Coniferous Forest
W-Z	Chaparral

For example, if your name is Jane Doe, then your project will be over the North American Desert

bi·ome |'bī,ōm|

noun Ecology

a large naturally occurring community of flora and fauna occupying a major habitat, e.g., forest or tundra.

ORIGIN early 20th cent.: from BIO- [life] + -OME .

col·lage

/kə'lāZH,kō-,kō-/ ◀

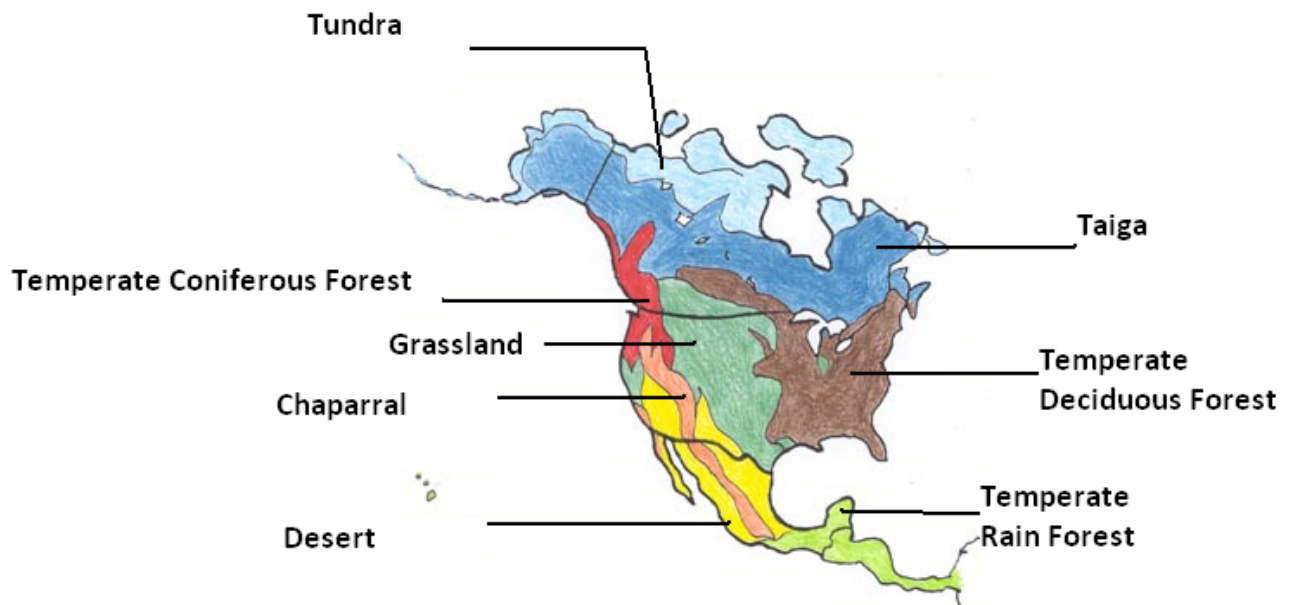
noun

a piece of art made by gluing various materials such as pictures, words or short phrases on a backing

* the art of making collages

* a combination or collection of various things that overlap each other

Look at this **map** to see the major biomes found here.



Example of a Collage...notice... **MANY** pictures and **MANY** words overlapping each other



II. Autobiography- This is all about you!!!

- A. Scenario – 30 year High School Reunion
 - a. What college did you go to
 - i. What **BIOLOGY** degree did you get?
 - ii. What year did you graduate?
 - b. What Biology related fields are you now working in?
 - c. What company/business hired you? (employer)
 - d. What are your job responsibilities?
 - e. What awards did you receive at your job?
 - f. Now that you have been working for numerous years, what are two things that you wish you would have done better in high school?
 - g. What websites did you use to get any information (not search engines)
 - h. And last of all, what do you now look like?

- B. Specs –
 - a. **Half size poster** “portrait view”
 - b. Large picture of self in the middle (30 years from now????)
 - c. Name –Title
 - d. Job- subtitle
 - e. Birthday – subtitle
 - f. a-f in part A **around** your picture
 - use bullets
 - **no more** than 6 words per bullet
 - you may use more than one bullet per section

C. See Example



Karen White
Biology and Physics Teacher
 April ____, 19__ __

COLLEGE:
 *University of Houston
 *B.S. in science education
 *1991

AWARDS:
 *nominated teacher of the year
 *principal's award

EMPLOYER
 Belleville ISD

RESPONSIBILITIES
 *preparing and delivering lessons
 *give appropriate feedback
 *maintain records of pupils' progress

REFLECTION:
 * Better grades
 *more social clubs

