

**Biology**  
**Mr. Grady**  
**Room 205**  
*Course Overview*

**COURSE DESCRIPTION/OBJECTIVES**

Biology is a two-trimester course offered at the college prep level. Students will learn to understand and apply fundamental concepts of biology through lectures and discussions, laboratory and independent problem solving activities, teacher demonstrations, text and supplementary readings, and homework. They will also develop analytical and scientific thinking skills, and qualitative aspects of problem solving in biology as different biological processes are introduced.

Below is a list of the general concepts of study for this course. They are:

- Laboratory Skills
- General scientific practice
- Cell Biology
  - Fundamental life processes of plants and animals depend on a variety of chemical reactions that are carried out in specialized areas of the organism's cells.
- Genetics
  - Mutation and sexual reproduction lead to genetic variation in a population.
  - A multicellular organism develops from a single zygote, and its phenotype depends on its genotype, which is established at fertilization.
  - Genes are a set of instructions, encoded in the DNA sequence of each organism that specify the sequence of amino acids in proteins characteristic of that organism.
  - The genetic composition of cells can be altered by incorporation of exogenous DNA into the cells.
- Ecology
  - Stability in an ecosystem is a balance between competing effects.
- Evolution
  - The frequency of an allele in a gene pool of a population depends on many factors, and may be stable or unstable over time.
  - Evolution is the result of genetic changes that occur in constantly changing environments.
- Physiology
  - As a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable (homeostatic), despite changes in the outside environment.
  - Organisms have a variety of mechanisms to combat disease.

## TEXT

*Biology*, Prentice Hall, 1995.

## SUPPLIES

Please bring the following items to class **daily**:

- Writing utensils- Pens and pencils.
- 3-ring binder with dividers to hold all handouts, homework, labs, and notes.

## EVALUATION

### **Grade Breakdown**

Quizzes	5%	*Binder grades will be recorded as a Quiz.
Written Report	10%	
Final Exam	15%	
Homework	15%	
Labs	25%	
Exams	30%	

## HOMEWORK

1. Homework will normally be due the day after being assigned; for example, homework assigned on Monday is due Tuesday. In case of absence, students will have one additional day for every day absent to turn in assignments. Note: This does *not* apply to long-term assignments (e.g. lab reports, term paper) given before an absence.

*\* No late work will be accepted.*

## LABS AND EXAMS

1. Lab reports will be turned in for each of the assigned experiments, and must follow the guidelines that will be specified for lab reports. Labs will normally be due three days after completion of the lab work. Late labs are *not* accepted.
2. Exams or labs missed due to absence can be made up by scheduling with me. *It is your responsibility to speak to me the day you return to do so. Labs or exams that have not been scheduled within one week of your return to school will be recorded as a zero.*

**PROCEDURES**

- Be in your seat, working on the assignment posted on the board or overhead, as the bell rings. The beginning of class is an individual, talk-free work time.
- Cell phones need to be turned to silent/off and put away. Confiscated phones may be picked up at the end of the day for the first offense, and in the principal’s office for further offenses.
- Include full heading on all assignments:  
Name  
Date  
Period
- Turn in all assignments on time. **There will be no credit for late work!**
- Call a classmate the same day you are absent to find out what information and assignments you missed. Check with Mr. Grady for any missed handouts.

Name \_\_\_\_\_ Phone # \_\_\_\_\_  
Name \_\_\_\_\_ Phone # \_\_\_\_\_

- Speak one at a time, listen to your classmates, when they speak, and use appropriate language.
- Mr. Grady will dismiss you, not the clock.

*I reviewed the overview and procedures with my son/ daughter. I commit to being actively involved in my student’s education and will contact Mr. Grady at [patrick.grady@district6.org](mailto:patrick.grady@district6.org), or (541) 494- 6260 with questions or feedback.*

\_\_\_\_\_  
**Parent/ Guardian Signature** \_\_\_\_\_  
**Date**

*I reviewed the overview and procedures. I commit to putting my best effort into this course. I take full responsibility for my own learning and will stay focused during class, ask questions, and attend tutorial when I need extra help.*

\_\_\_\_\_  
**Student Signature** \_\_\_\_\_  
**Date**

Please keep this signed copy in the front of your notebook.