Ms. Dostatni

Bishop Noll Institute

Honors Biology – Course Expectations

Course Description

Students will study the major life processes common to all organisms through regular laboratory investigations and modeling activities. The students will be introduced to the fundamental concepts of biology. An investigation of life from the molecular level to the complexity of the entire organism and its role in ecosystems within the biosphere will take place. Through classroom and laboratory experiences, students will be expected to gain an understanding of biological topics, the historical development of biology, and its use in various careers.

General Course Goals

-To gain knowledge of the living world

-To enhance critical thinking skills

-To enhance laboratory and problem solving skills

-To be able to recognize and understand the use and purpose of Biology in our daily lives

Course Materials – (Must bring to class everyday!)

-Textbook: Biology (Miller & Levine)

- Binder with printed chapter notes, folder, and loose leaf paper

- Pen and pencil

- Highlighter and Calculator (when needed)

Grade Determination

According to the Bishop Noll grading scale, A = (90-100) B = (80-89) C = (70-79) D = (60-69) F = (59 and below).

In Biology, grades will be determined in the following manner:

Test: 50%

Homework/Free-response: 20%

Lab/Project/Quiz: 30%

*The end of course assessment exam will count for a small percentage of each student's final 2nd semester grade.

Class Procedures

When students enter the classroom each day, they are expected to take their assigned seat, have their completed homework ready to turn in, and read the board for information about the daily lesson. All basic classroom rules will be listed in the classroom and discussed with the students.

Homework

Homework, lab reports, and free-response questions are significant parts of the grade and should always be completed to the best of the student's ability. They are assigned for the purpose of reinforcing what is taught in class and will allow students to take what they have learned and enhance it by thinking about it in different ways. It is expected that all assignments are taken seriously and completed as proficiently as possible. Regular homework will not be accepted late for full credit. Homework that is one day late will be given half credit. After one day, students will be given a grade of zero for the homework assignment. Labs and other projects will be accepted late but will be dropped a complete letter grade for each day in which it is late. Not only will homework help a student to stay engaged in class, but it will also be valuable outside of school and in future endeavors as students strive to develop a strong work ethic.

Blackbaud

Blackbaud is used as a communication and organization tool for Biology class. Students and parents should check Blackbaud consistently in order to be fully aware of what is happening in class. Useful information such as grades, assignments, upcoming tests/quizzes, notes, and study guides can be found on Blackbaud.

Attendance and Tardy Policy

Class time is extremely valuable. If for any reason a student is absent, he or she must complete all missed work. It is the student's responsibility to ask the teacher what they have missed upon returning to class. They may also check Blackbaud. The appropriate amount of time will be allowed to complete all missed work. Any tests or quizzes in which the student was informed of before their absence, must be taken the day it was originally scheduled when they return, unless it is determined by the teacher that the student did not have all of the information necessary to adequately study for the test or quiz. Being tardy to class is not tolerated. Students will be considered "tardy" if they are not in the classroom when the bell rings. According to the student handbook, detentions will be issued for tardiness.

Thank you in advance for all of your efforts in making this Biology course an exciting and enriching learning experience for all of us! Parents, feel free to contact me if you have any questions or concerns. I am available by email at rdostatni@bishopnoll.org.

Tentative Course Calendar

TIME FRAME	CONTENT	SKILLS (Indiana Standards)
August	Chapter 1: The Science of Biology 1.1: What is Science? 1.2: Science in Context 1.3: Studying Life	 B.1.1 B.1.2, B.2.1, B.3.3, B.5.2, B.6.2, B.6.3
September	Chapter 2: The Chemistry of Life 2.1: The Nature of Matter 2.2: Properties of Water 2.3: Carbon Compounds 2.4: Chemical Reactions and Enzymes	 B.1.1, B.1.3 B.1.1, B.1.2, B.5.1, B.5.4 B.1.2, B.1.3, B.5.4, B.5.5
October	Chapter 7: Cell Structure and Function 7.1: Life is Cellular 7.2: Cell Structure 7.3: Cell Transport 7.4: Homeostasis and Cells	 B.1.1, B.2.1, B.2.2 B.2.1, B.2.2, B.2.3, B.2.4, B.2.5, B.2.6 B.1.2, B.2.2, B.2.5 B.1.3, B.2.1, B.2.5, B.2.6, B.3.3, B.6.2, B.6.3
November	Chapter 8: Photosynthesis 8.1: Energy and Life 8.2: Photosynthesis: An Overview 8.3: The Process of Photosynthesis Chapter 9: Cellular Respiration and Fermentation 9.1: Cellular Respiration: An Overview 9.2: The Process of Cellular Respiration 9.3: Fermentation	 B.3.1, B.3.2, B.3.3, B.3.5, B.1.2 B.3.1, B.1.1, B.3.4, B.2.1, B.2.3 B.2.3, B.3.1 B.3.1, B.3.2 B.1.2, B.2.3, B.3.2
December	Chapter 10: Cell Growth and Division 10.1: Cell Growth, Division, and Reproduction 10.2: The Process of Cell Division 10.3: Regulating the Cell Cycle 10.4: Cell Differentiation	 B.2.1 B.5.1, B.6.1 B.1.2, B.1.3, B.3.3, B.5.5 B.1.3, B.3.3, B.6.3

January	Chapter 11: Introduction to Genetics 11.1: The Work of Gregor Mendel 11.2: Applying Mendel's Principles 11.3: Other Patterns of Inheritance 11.4: Meiosis Chapter 12: DNA 12.1: Identifying the Substance of Genes 12.2: The Structure of DNA 12.3: DNA Replication	 B.5.2, B.5.5, B.5.6, B.7.1, B.7.2, B.7.3 B.7.1, B.7.2, B.7.3 B.1.3, B.5.6, B.7.2, B.7.3 B.6.4, B.6.5 B.5.1, B.5.2 B.5.1 B.1.2, B.7.4
February	Chapter 13: RNA and Protein Synthesis 13.1: RNA 13.2: Ribosomes and Protein Synthesis 13.3: Mutations Chapter 14: Human Heredity 14.1: Human Chromosomes Chapter 15: Genetic Engineering	 B.1.2, B.5.3 B.1.2, B.2.4, B.5.3, B.5.5, B.8.1 B.5.3, B.5.4, B.5.5, B.7.4, B.7.5 B.1.2, B.5.1, B.5.2, B.5.4, B.5.5, B.5.6, B.7.1, B.7.2, B.7.3, B.7.5 B.7.5
March	Chapter 16: Darwin's Theory of Evolution Chapter 17: Evolution of Populations Chapter 18: Classification	B.8.2, B.8.3, B.8.4, B.8.5 B.5.2, B.5.6, B.6.5, B.7.5, B.8.3, B.8.4, B.8.5, B.8.6 B.8.2, B.8.3, B.8.4
April	Chapter 19: History of Life Chapter 20: Viruses and Prokaryotes	B.6.5, B.8.1, B.8.4, B.8.6, B.8.7 B.4.4, B.8.2, B.8.4
May	Chapter 3: The Biosphere Chapter 4: Ecosystems and Communities Chapter 5: Populations Chapter 6: Humans in the Biosphere	B.3.1, B.3.4, B.3.5, B.4.1, B.4.2, B.4.4 B.4.1, B.4.2, B.4.4 B.4.1, B.4.2, B.4.3, B.4.4 B.4.2, B.4.3, B.4.4