

Biology B

Course Code SCI202

Course Description: Biology is a laboratory course covering the study of living things. Students will learn about the world of animals, plants and microorganisms and learn to make wise decisions concerning biological issues that impact all life, including health and environmental challenges.

Course Outline:

Unit 1: Viruses, Prokaryotes, and Protists

- Lesson 1: Viruses
- Lesson 2: The Five Kingdoms
- Lesson 3: Protists

Unit 2: Fungi and Plants

- Lesson 1: Fungi
- Lesson 2: Plants
- Lesson 3: Seed Plants

Unit 3: Animals

- Lesson 1: Invertebrates
- Lesson 2: Annelids
- Lesson 3: Anthropods

Unit 4: Phylum Chordata

- Lesson 2: Reptiles and Birds
- Lesson 3: Mammals

Unit 5: Ecology

- Lesson 1: Abiotic Influences in Ecosystems
- Lesson 2: Population Dynamics
- Lesson 3: The Human Impact on Biodiversity

Course Objectives:

Students will be able to accomplish the following:

- Describe viruses and understand their importance.
- Identify the key characteristics of the major groups of organisms, including bacteria, protists, fungi, plants, and animals.

- Understand the basic principles of ecology, including ecosystems, the food pyramid and food chain, and population growth.
- Explain how organisms are classified based on their similarities and differences, as well as their evolutionary relationships.
- Describe how organisms interact with the environment and understand the consequences of these interactions

Number/Description of Projects, Exams, Activities, etc.:

- **5 Lesson Quizzes** - There is one Lesson Quiz per unit covering the main concepts of each unit.
- **10 Laboratory Activities** - There are two Laboratory Activities per unit that cover specific topics or concepts presented in the course.
- **5 Discussion Groups** - There is one Discussion Group assignment per unit covering a specific topic. Students' post researched opinions and findings for the given topic.
- **5 Unit Projects** - Every unit has a project that incorporates elements covered in the unit. It is submitted to the instructor for grading and feedback.

- **1 Final Project** - Upon completion of the course, the student will need to complete an online final project. To complete the final project, the student will need to write a paper with information about the biology-related career they have researched. The final project will be electronically submitted to the teacher for grading.
- **1 Final Exam** - Upon completion of the course, the student will need to complete an online comprehensive evaluation. The student will be given one opportunity to take the evaluation and submit it for computer- automated grading. To complete the evaluation the student will need to answer 50 objective questions about the material covered in the course. The student will receive instant feedback regarding his or her grade on the final evaluation.

Materials: All course materials have been approved for district use.

Timelines & Methods for evaluating student progress: Students are expected to log in daily and submit assignments on a weekly basis. Progress will be evaluated each month based progress towards assignment completion of assignments.

This course meets state and district graduation requirements in the area of SCIENCE.

Weekly contact will be conducted through a submitted assignment with instructor feedback. Students who do not submit an assignment are expected to email or call his/her instructor.

Each student is **expected to spend a minimum of five hours** per week on this course. Additional hours may be necessary to complete the course successfully.

Beginning & end date: see the assignment list in gradebook.