

Instructor: Dean Cain

Biology I

Classroom: 1205 (upstairs building 1)

Mission Statement

Introduce and or expand the ideas, theories, mechanisms and concepts of Biology to our students.

Goals, Objectives and Overview of Syllabus

First Semester

- Follow safe laboratory practices.
- Apply the Scientific Method in solving problems.
- Become comfortable in using the metric system of measurement.
- Be able to describe and understand the functions of the basic units of life on the biological, cellular, molecular and chemical levels.
- Be able to describe the structure and importance of DNA to life.

Second Semester

- Understand the concepts of genetics and patterns of inheritance of genetic traits.
- Distinguish between asexual and sexual reproduction.
- Describe the process of cellular reproduction by mitosis and meiosis.
- Be familiar with the theory of evolution and natural selection.
- Understand the concepts of Ecology on the biome, ecosystem, community and population levels.
- Understand the system to classify organisms.

Types of Instruction and Assignments

- Lecture
- Note taking
- Oral question and answer

- Class discussion
- Group work - Labs, discussion and projects.
- Film
- Drawing, diagramming and labeling.
- Memorizing
- Written assignments - Answering questions, critical thinking, essays.
- Quizzes
- Tests

Grading

Grade Scale

90-100 = A

80-89 = B

70-79 = C

60-69 = D

59 or below = failing

Grading Method

Students will earn points on all work and or assignments. Each assignment will be worth a certain number of points.

The assignment will be graded with the following criteria in mind;

- Correctness
- Completeness
- On time, late work will be accepted but marked down accordingly.
- Depth and understanding of the concept. The ability to answer in complete and descriptive sentences.

- Following instructions.
- Neatness

Class Rules, Policies and Procedures

- Be on time and ready for class.
- Be prepared for class. Have a pen or pencil, and a notebook.
- Other items required for class include;
 - Colored pencils
 - Spiral notebook
- No eating or drinking in class except for water.
- No chewing gum
- No i-pods or telephones
- Sit where assigned
- Participate in class discussion
- Ask questions
- Be respectful of others
- Raise hand to speak, in other words, during discussion one person at a time should have the floor.
- Speak up to be heard. Air conditioning, computers produce a lot of white background noise.

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Biology II

Classroom: 1205 (upstairs building 1)

Class Description

Biology II is designed to introduce students to Anatomy and Physiology by comparing various organisms from the six kingdoms with the human body.

Mission Statement

Broaden the knowledge base of Biology and Anatomy and Physiology by comparing living organisms with the human body.

Overview of Syllabus

First Semester

- Review the Classification System
- The microscopic world of organisms - Viruses and Bacteria
- Protists and Fungi
- What is an animal? Characteristics, Body Plans and Adaptations
- Sponges, Cnidarians, Flatworms, and Roundworms
- Mollusks and Segmented Worms
- Arthropods
- Invertebrate Chordates
- Fishes and Amphibians
- Reptiles and Birds
- Mammals

Second Semester

- The Human Body- What is Anatomy and Physiology?
- Anatomical Position and Directional Terms

- Body Tissues- Epithelial and Connective
- The Integumentary System
- The Skeletal System
- The Muscular System
- The Nervous System
- The Endocrine System
- The Cardiovascular System
- The Respiratory System
- The Lymphatic System
- The Digestive System
- The Urinary System
- The Reproductive System
- Cat Anatomy and Dissection

Types of Instruction and Assignments

- Lecture
- Note taking
- Oral question and answer
- Class discussion
- Group work - Labs, discussion and projects.
- Film
- Drawing, diagramming and labeling.
- Memorizing
- Written assignments - Answering questions, critical thinking, essays.
- Quizzes
- Tests

Grading

Grade Scale

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80-89 = B

70-79 = C

60-69 = D

59 or below = failing

Grading Method

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