SCHOOL OF STEM SYLLABUS

TERM:

INSTRUCTOR:

COURSE CODE: BIO-207

OFFICE HOURS:

COURSE TITLE: Human Biology

OFFICE LOCATION:

DAY(S) AND TIME(S):

EMAIL:

LOCATION:

PHONE:

COURSE PREREQUISITE: Exit Academic Foundations

CREDITS: 4

COURSE DESCRIPTION:
Human Biology is a four credit course that gives students an overview of the anatomy and physiology of the human body's organ systems. The cardiovascular, the lymphatic, immune, urinary, muscular, skeletal, nervous, and endocrine systems are studied. To understand the importance of food intake for cell energy needs, body nutrition and the digestive system physiology are futher details. The focus on the cell's structures and organelles function is required to comprehend the different aspects of the organ systems physiology. Special attention is also accorded to the study of human inheritance and evolution. The course ultimately deals with fundamental chemical concepts that are needed to understand the biological process occurring in the human body.

STUDENT LEARNING OUTCOMES:
Upon completion of this course, the following objectives will be achieved:

1. Explain how to formulate a scientific hypothesis and recognize steps involved in testing it
2. Recognize the characteristics of all living things organization, cells structure and function, tissues, homeostasis mechanism and chemistry life.
3. Describe the structure and functions of the body different systems and the maintenance of the body (cardiovascular, lymphatic & immune, digestive, respiratory, and urinary systems)
4. Analyze the structure and functions of the skeletal and muscular systems and their role in movement and support of the human body.
5. Compare and contrast skeletal, cardiac and smooth muscles.
6. Discuss the mechanism of integration, coordination and regulations in the human body and the anatomy of organs in the nervous and endocrine systems.
7. Describe the DNA, human genetics, Patterns of inheritance and evolution.
8. Discuss some pathological conditions in different organ systems and their effects in the human body.

TEXTBOOK AND SUPPLEMENTAL MATERIALS:

Textbook: Human Biology 17th edition by Sylvia Mader and Michael Windelspecht

ISBN: 9781265671082

- Lab Manual Mader human Biology 16th ed. McGraw Hill ISBN 9781260482751
- If you are teaching Remote then Connect is require not the lab book

GRADING POLICY:

Two Exams	20%
Midterm	15%
Final Exam	25%
Written Assignments	10%
Two Lab Practical Exams	20%
Lab Reports	10%

Lab reports to be submitted one week after the lab, no late reports will be accepted

SAMPLE COURSE SCHEDULE:

Week	Topic	Lab Topic	L.O
1st	Exploring Life and Science	Lab Orientation Scientific Method	SLO 1
2nd	Chemistry of Life	Microscopes	SLO 2
3rd	Cell Structure and Function	Cells structure & function	SLO 2
4th	Organization and Regulation of Body Systems Exam I	Classification of tissue	SLO 2,3,8
5th	Heart and Blood Vessels Blood	Sheep heart dissection or anatomical models	SLO 3,8
6th	The lymphatic and Immune System	Handout	SLO 3,8

		Blood type	
7th	Digestive System and Nutrition	Digestive anatomical models	SLO 3,8
8th	**Midterm Exam**	Lab Practical I	SLO 1-3,8
9th	Urinary System	Dissection of the Sheep Kidney or anatomical model	SLO 3,8
10th	Skeletal System	Skeletal System. anatomical model	SLO 4,8
11th	Muscular System	Muscular System. anatomical model	SLO 5,8
12th	Nervous System **Exam II**	Dissection of the Sheep Brain, or anatomical model	SLO 6,8
13th	The Endocrine System	Lab Practical II	SLO 6,8
14th	Patterns of Inheritance DNA basic structure Evolution	Mitosis & Meiosis slides and anatomical model	SLO 7,8
15th	**Final Exam**		SLO 1-8

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https://www.hccc.edu/administration/academic-affairs/syllabus-addendum.html