

BME107 Anatomy and Physiology

Level: 1

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

This course examines the organization of the human body at the macroscopic and microscopic levels. The various topics include the study of elementary cell biology and the integration of physiological components. The study of these components will involve an understanding of four major areas of physiological interest: organization of the body and its protective covering; skeletal movement and muscles; circulatory system and its components; and the respiratory system. This course also covers a summary of some of the common medical conditions related to the failings of these physiological systems.

The laboratory session is on Trauma First Response training (Part 1) conducted by ARIS Integrated Medical.

Topics:

- Introduction, cells, membranes and organs
- Respiratory System
- Blood
- Heart and Circulatory System
- Musculoskeletal System
- Integumentary System

Textbooks:

BME107 Study Guide (Online)
ISBN-13: SG-0854

Laboratory Manual for BME107/108
ISBN-13: OT-4616

Seeley's Essentials of Anatomy and Physiology 11th Cinnamon VanPutte, Jennifer Regan, Andrew Russo McGraw-Hill
ISBN-13: 9781264995158

Learning Outcome:

- Define the cell structures
- Describe how cells combine to become tissues and then organs
- Explain and illustrate the major systems in the human body (e.g. cardiovascular, respiratory, musculoskeletal)
- Demonstrate the practical aspects related to anatomy and physiology
- Predict the common medical conditions to the failing of these human physiological systems
- Apply the knowledge of anatomy and physiology of the systems in the working environment like prevention of certain diseases due to failing of normal physiological systems

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	QUIZ 1	12
	TUTOR-MARKED ASSIGNMENT 1	12
Overall Examinable Components	Written Exam	70
Total		100

*The information listed is subject to review and change.