

# **BME108e Physiology and Infectious Diseases**

**Level:** 1

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JAN

**E-Learning:** BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

## **Synopsis:**

BME108 continues from BME107 and presents the rest of the body systems, particularly the immunological, nervous digestive and excretory systems. Attention is given to the organization of the human body at both the macroscopic and microscopic levels, and to the integration of physiological components. The course will also introduce the agents that cause disease, the body's response to the disease, disease transmission and the strategies to prevent the spread of disease.

The Laboratory session is on Trauma First Response training (Part 2). Students who successfully complete Parts 1 and 2 will be awarded US NAEMT certification.

## **Topics:**

- Common infectious diseases and immunology
- Infectious diseases: mode of transmission and prevention strategy
- Nervous System
- Special Senses
- Digestive System
- Kidney System

## **Textbooks:**

by Vanputte: SEELEY'S ESSENTIALS OF ANATOMY & PHYSIOLOGY (eTextbook) 9 edition  
McGraw-Hill  
ISBN-13: 9781307185140

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McGraw-Hill  
ISBN-13: 9781307185140-AA

**Learning Outcome:**

- Explain and illustrate the major systems in the human body (e.g. nervous, digestive and kidney systems)
- Define the basic organisms in infectious diseases and the common mode of transmission.
- Discuss the prevention and control of infectious diseases.
- Demonstrate the practical aspects related to anatomy and physiology
- Determine the mode of transmission of infectious diseases
- Predict the common medical conditions to the failing of these human physiological systems

**Assessment Strategies:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
PRE-CLASS QUIZ	2
QUIZ	12
PRE-CLASS QUIZ	2
QUIZ	12
PRE-CLASS QUIZ	2
<b>Sub-Total</b>	<b>30</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
Written Exam	70
<b>Sub-Total</b>	<b>70</b>

**Weightage Total** **100**