



National University of Sciences and Technology

Course Description

| Course Title | Course Code | Credit Hours |
|------------------------------|-------------|--------------|
| Human Physiology and Anatomy | BMES-821 | 3 – 0 |

TEXT BOOK:

- Arthur C. Guyton, John E. Hall: Textbook of Medical Physiology. Amsterdam: Elsevier 14th Edition 2020 (latest edition).
- William H. Howell: A Textbook Of Physiology For Medical Students And Physicians V2. Whitefish: Kessinger
- Drake, R., Wayne Vogl, A., Mitchell, A.: Gray's Anatomy for students. Churchill Livingstone Tortora/ Grabowski: Principles of Anatomy and Physiology; John Wiley & sons, inc. 3RD edition 2015 (latest edition).

REFERENCE BOOK

- Prerequisites: Biology, Biotechnology, Pharmacy, Biomedical Engineering

COURSE OBJECTIVES:

Human Physiology and Anatomy is a laboratory-based course that investigates the structure and function of the human body. Students will engage in many topics and competencies related to truly understanding the structure and function of the human body. The main part of the course is dedicated to the most important systems of organs (respiration, heart and circulation, nervous system, digestion, secretion, skeleton and muscles, immune system, reproductive system and sensory organs)

COURSE OUTLINES

- Introduction to HAP
- Basic Chemistry of life
- Cells, Tissues and Membranes
- Integumentary system
- Skeletal system
- Muscular system
- Nervous system
- Senses
- Endocrine System
- Blood
- Heart
- Digestive System

ASSESSMENTS

| Description | Percentage Weightage (%) |
|--------------------|--------------------------|
| Assignments | 05-10% |
| Quizzes | 10-15% |
| Mid Semester Exams | 30-40% |
| End Semester Exam | 40-50% |