

DISCLAIMER: The course outline below serves as a general informational guide for students. Course content and assessment modes may vary for different lecturers. Actual course outlines will be made known to students on NTULearn by the individual lecturers. **DO NOT** purchase textbooks based on the information contained in this document.

SS1101 Human Anatomy and Physiology

[Lectures: 24 hours; Tutorial and Laboratory Sessions: 12 hours; Pre-requisites: None; Academic Unit: 3.0]

Learning Objective

The objectives of this course are to learn about the structures and functions of the various organ systems within the human body and the role of these systems in physical performance, health and fitness.

Content

This course introduces the various organ systems of the human body and the part that each organ system plays in physical performance, health and fitness. The course content describes:

- Organisation of the human body systems.
- Major structures within the human organ systems.
- Major functions of each organ system.
- Relate the role of each organ system to human performance, health and fitness.

Course Outline

S/N	Topic	Lecture Hours	Tutorial hours
1	Organisation of the human body	2	1
2	Cells and tissues	2	1
3	Introduction to the skeletal-muscle system	2	1
4	Skeletal-muscle system: the upper extremities	2	1
5	Skeletal-muscle system: the lower extremities	2	1
6	Skeletal-muscle system: the trunk and spinal column	2	1
7	The nervous system: organisation and function	2	1
8	The nervous system: neural control	2	1
9	The cardiovascular system	2	1
10	The respiratory system	2	1
11	The digestive system	2	1
12	The endocrine system	2	1

Learning Outcome

Students will be able to describe the major structures and functions of the organ systems in the human body most related to performance, health and fitness. Laboratory experience will provide the students opportunities to apply course content and learning in a practical setting.

Student Assessment

Students will be assessed by:

- a. Final 2.5-hour written examination (60%)
- b. Continuous assessment (40%)
 - i) **Presentation.** Students will present on a topic related to one human organ system. (20%)
 - ii) **Multiple choice test.** Students will be assessed on general knowledge questions related to the course content. (20%)

Textbooks/References

- a. Shier D, Butler J, Lewis R, *Hole's Human Anatomy & Physiology*, 13th Edition, McGraw-Hill, 2013.
- b. Marieb E, *Essentials of Human Anatomy & Physiology*, 9th Edition, Pearson International, 2009.
- c. Bartholomew M, *Essentials of Anatomy & Physiology*, 6th Edition, Pearson International, 2013.