

Subject Description Form

Subject Code	HSS2011
Subject Title	Human Anatomy
Credit Value	3
Level	2
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	By completing this subject using a systemic and regional approach in teaching and learning, students will be able to demonstrate a basic understanding of the structure, organization and function of the human body.
Intended Learning Outcomes	<p>Upon successful completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. Understand and familiarize anatomical terminology of the human body b. Identify and locate relevant anatomical structures c. Demonstrate a basic understanding of tissue organization within the human body d. Integrate systemic and regional aspects of human anatomy and understand their spatial relationship e. Explain function of anatomical structures f. Recognize anatomical pathway of important body systems and regions
Contribution to Programme Outcomes (Refer to Part I Section 10)	<ul style="list-style-type: none"> ▪ Programme Outcome 1: Demonstrate an ability to apply knowledge of mathematics, science, and engineering appropriate to the Biomedical Engineering (BME) discipline. (Teach) ▪ Programme Outcome 3: Demonstrate an ability to design a system, component, or process relevant to BME to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability. (Teach) ▪ Programme Outcome 5: Demonstrate an ability to understand the impact of BME solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public. (Teach) ▪ Programme Outcome 9: Demonstrate an ability to function in multi-disciplinary teams. (Teach) ▪ Programme Outcome 11: Demonstrate an ability to communicate effectively and advise clients, professional colleagues and other members of the community. (Teach)

<p>Subject Synopsis/ Indicative Syllabus</p>	<p>The content of important body systems and regions will be discussed in the following four modules:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Module I The Thorax</p> <p>Cardiopulmonary System Regional Anatomy of the Thorax</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Module III The Abdomen and Pelvis</p> <p>Digestive System Urogenital System Regional Anatomy of the Abdomen & Pelvis</p> </td> </tr> <tr> <td style="width: 50%; vertical-align: top;"> <p>Module II Neuroanatomy</p> <p>Nervous System Special Senses Neuroanatomy</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Module IV Musculoskeletal system</p> <p>Musculoskeletal System Head & Neck Upper and Lower Limbs</p> </td> </tr> </table>	<p>Module I The Thorax</p> <p>Cardiopulmonary System Regional Anatomy of the Thorax</p>	<p>Module III The Abdomen and Pelvis</p> <p>Digestive System Urogenital System Regional Anatomy of the Abdomen & Pelvis</p>	<p>Module II Neuroanatomy</p> <p>Nervous System Special Senses Neuroanatomy</p>	<p>Module IV Musculoskeletal system</p> <p>Musculoskeletal System Head & Neck Upper and Lower Limbs</p>																										
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<p>Teaching/Learning Methodology</p>	<p>Various eLearning methods will be promoted in this subject to encourage student-centered active learning.</p> <p>Self-paced practical sessions will be facilitated by the 3D anatomical visualizer installed in the FHSS Virtual Anatomy & Physiology Laboratory, in order to consolidate learning and understanding.</p>																														
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 25%;">Specific assessment methods/tasks</th> <th rowspan="2" style="width: 10%;">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th style="width: 5%;">a</th> <th style="width: 5%;">b</th> <th style="width: 5%;">c</th> <th style="width: 5%;">d</th> <th style="width: 5%;">e</th> <th style="width: 5%;">f</th> </tr> </thead> <tbody> <tr> <td>Continuous Assessment (Group assignments & Individual written test)</td> <td style="text-align: center;">100%</td> <td style="text-align: center;">√</td> <td style="text-align: center;">√</td> <td style="text-align: center;">√</td> <td style="text-align: center;">√</td> <td style="text-align: center;">√</td> <td style="text-align: center;">√</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">100%</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Note: Group assignments will be assigned in the discipline-specific tutorials, using the format of mini-presentation and E-poster.</p> <p><u>Collaborative learning</u></p> <p>Groups will be self-formed by students in tutorials to discuss the anatomical pathway of particular case studies and the function of certain structures.</p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d	e	f	Continuous Assessment (Group assignments & Individual written test)	100%	√	√	√	√	√	√	Total	100%						
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Student Study Effort Expected	Class contact:	(36 Hrs.)
	▪ Online / Face-to-face Lecture	26 Hrs.
	▪ In-class activity sessions	10 Hrs.
	Other student study effort:	(93 Hrs.)
	▪ Independent study	43 Hrs.
	▪ Collaborative learning	50 Hrs.
	Total student study effort	129 Hrs.
Reading List and References	<p><u>Text Book</u></p> <ul style="list-style-type: none"> ▪ Martini FH, Nath JL, Bartholomew EF (2018) <i>Fundamentals of Anatomy and Physiology</i>, 11th edition. Pearson. ▪ ANA101x Human Anatomy MOOC https://www.edx.org/course/human-anatomy <p><u>Reading List</u></p> <ul style="list-style-type: none"> ▪ Saladin KS (2019) <i>Human Anatomy</i>, 6th edition. Singapore: McGraw Hill Inc. ▪ Moore KL, Dalley AF, Agur AMR (2017) <i>Clinically Oriented Anatomy</i>, 8th edition. Philadelphia: Lippincott Williams & Wilkins. ▪ Abrahams PH, Hutchings RT, Marks Jr SC (2008) <i>McMinn's Colour Atlas of Human Anatomy</i>, 5th edition. Mosby Elsevier. ▪ Gosling JA, Harris PF, Humpherson JR, Whitmore I, Willan PLT (2016) <i>Human Anatomy Color Atlas and Text</i>, 6th edition. New York: Mosby. 	
Date of Last Revision	June 2023	