



COURSE OUTLINE: BIOL1050 - ANTMY & PHYS

Prepared: Leslie Dafoe and Ashley Bernardo

Approved: Rebecca Keown - Dean

Course Code: Title	BIOL1050: HUMAN ANATOMY AND PHYSIOLOGY
Program Number: Name	3401: HONOURS BSCN
Department:	BSCN - NURSING
Academic Year:	2025-2026
Course Description:	This course describes human anatomy and physiology at the cellular, tissue, organ, and system levels of organization. Aspects of this course will concentrate on the clinical application of anatomy and physiology.
Total Credits:	4
Hours/Week:	6
Total Hours:	72
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	BIOL1150
Essential Employability Skills (EES) addressed in this course:	<p>EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p>
General Education Themes:	Science and Technology
Course Evaluation:	Passing Grade: 65%, A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.



Books and Required Resources:

1 white-knee length lab coat, 1 dissection kit, 1 box of nitrile gloves, optional 1 pair of safety glasses

Laboratory Manual for Anatomy and Physiology by Allen

Publisher: John Wiley & Sons Canada Edition: 7th

ISBN: 9781394220199

Course package includes: Allen 7e LL with Tortora 16e WPNGC 2 Sem Set

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Label, using the correct anatomical terminology, the parts of the human body, and describe their functions.	1.1 Define anatomy and physiology. 1.2 Use standard anatomical terminology to describe body regions, directions, planes, and body cavities. 1.3 Identify major organs and anatomical structures in each body region using correct terminology. 1.4 Identify the major body cavities and associated membranes, and describe their anatomical structure and function in protecting and organizing internal organs.
Course Outcome 2	Learning Objectives for Course Outcome 2
2. Explain how all cells, tissues, organs and body systems contribute to homeostasis.	2.1 Describe the hierarchical organization of the human body, including levels from atoms and molecules to organ systems. 2.2 Explain how cells, tissues, organs and body systems contribute to homeostasis. 2.3 Describe the general functions of each major organ system, including how structure relates to function. 2.4 Be able to explain how maintenance of homeostasis is essential to maintaining health, and how/why losses of homeostasis can alter the health status of a person. 2.5. Recognize the major tissue types and locations for epithelial, connective, muscle and nervous tissues.
Course Outcome 3	Learning Objectives for Course Outcome 3
3. Explain how chemistry is essential to the functioning of cells, tissues, organs, and how chemical changes can either support or challenge homeostasis.	3.1 Identify the major structures of a typical human cell and describe how each contributes to the chemical processes essential for cell function and survival. 3.2 Describe how water moves into and out of cells through osmosis and diffusion, and explain the importance of these processes in maintaining cellular homeostasis. 3.3 Explain the role of enzymes and ATP in metabolic reactions and how these biochemical processes support cell and tissue function.
Course Outcome 4	Learning Objectives for Course Outcome 4
4. Discuss the importance of each of the body/organ systems in maintenance of homeostasis by detailing their structure and function(s).	4.1 Describe the structure and layers of the skin and associated structures (hair, nails, glands). 4.2 Identify the major components of the skeletal system and describe the structure of bone tissue. 4.3 Describe the types of muscle tissue (skeletal, cardiac, smooth) and their structural characteristics. 4.4 Outline the structural divisions of the nervous system (CNS)



		and PNS) and key functional areas.
	Course Outcome 5	Learning Objectives for Course Outcome 5
	5. Describe how particular tissue types work and how their specialized structures contribute to their functions for all of the major organ/body systems.	5.1 Describe how the skeletal system interacts with other systems (e.g., muscular and endocrine) to maintain structural and metabolic balance. 5.2 Explain how the nervous system regulates homeostasis through rapid communication, reflex pathways, and integration with other body systems.
	Course Outcome 6	Learning Objectives for Course Outcome 6
	6. Describe how various organ systems contribute to homeostasis of the entire body as well as towards other organ systems. Detail the interdependence of organ systems with one another and explain how this helps to maintain homeostasis.	6.1 Explain how the integumentary system contributes to homeostasis through thermoregulation, barrier protection, and sensory reception. 6.2 Explain the skeletal system's role in homeostasis through support, protection, mineral storage, and blood cell production. 6.3 Explain how muscle contraction supports homeostasis via movement, posture, heat production, and circulation.
	Course Outcome 7	Learning Objectives for Course Outcome 7
	7. Explain how maintenance of homeostasis is essential to maintaining health, and how/why losses of homeostasis can alter the health status of a person.	7.1 Define homeostasis and describe its role in maintaining a stable internal environment necessary for health. 7.2 Identify and describe negative and positive feedback mechanisms and explain their roles in maintaining or disrupting homeostasis.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Final Lab Test	15%
Final Theory Exam	30%
Lab Participation and Technique	5%
Lab Quizzes	15%
Presentation	5%
Theory Test 1	15%
Theory Test 2	15%

Date: August 13, 2025

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.