

Prepared: Joanna MacDougall/Allan Kary Approved: Bob Chapman

Course Code: Title	OPA103: HUMAN ANATOMY
Program Number: Name	3022: OCCUP/PHYSIO/ASSIST
Department:	OTA/PTA ASSISTANT
Semester/Term:	17F
Course Description:	During this course the student will develop a knowledge base of anatomy and physiology of the human body with special attention to the neurological and musculoskeletal systems, as required for the needs of the Occupational Therapist Assistant and Physiotherapist Assistant. Other systems addressed in this course include the special senses of the eye and ear, as well as the cardiovascular system, respiratory system, digestive system, urinary system and reproductive system. The lab component will focus on developing competence in the identification and palpation of musculoskeletal surface anatomy.
Total Credits:	5
Hours/Week:	5
Total Hours:	75
Substitutes:	RSP100
This course is a pre-requisite for:	OPA106, OPA107, OPA108, OPA109, OPA110, OPA112, OPA113, OPA114, OPA115, OPA130, OPA131
Vocational Learning Outcomes (VLO's): Please refer to program web page for a complete listing of program outcomes where applicable.	<ul> <li>#1. Communicate appropriately and effectively, through verbal, nonverbal, written and electronic means, with clients, their families, and significant others, occupational therapists, physiotherapists, other health care providers, and others within the role of the therapist assistant.</li> <li>#8. Perform effectively within the roles and responsibilities of the therapist assistant through the application of relevant knowledge of health sciences, psychosociological sciences, and health conditions.</li> </ul>
Essential Employability Skills (EES):	<ul> <li>#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</li> <li>#2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.</li> <li>#4. Apply a systematic approach to solve problems.</li> <li>#6. Locate, select, organize, and document information using appropriate technology and</li> </ul>



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	<ul> <li>information systems.</li> <li>#7. Analyze, evaluate, and apply relevant information from a variety of sources.</li> <li>#9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</li> <li>#10. Manage the use of time and other resources to complete projects.</li> <li>#11. Take responsibility for ones own actions, decisions, and consequences.</li> </ul>
Course Evaluation:	Passing Grade: 60%, C
Books and Required Resources:	Essentials of human anatomy and physiology. (2015). by Marieb, Elaine Publisher: Benjamin Cummings/Addison Wesley Longman, Inc. Edition: 12th
	Clinical Kinesiology and Anatomy. (2011). by Lippert, Lynn Publisher: F.A. Davis Company Edition: 5th (purchased/required for concurrent course OPA104)
	Trail Guide to the Body by Biel, A Publisher: Books of Discovery Edition: 5th
	The AnatomyMapp (By Trail Guide to the Body) (highly recommended to purchase the App)
Course Outcomes and Learning Objectives:	Course Outcome 1.
	Demonstrate an understanding of the basic structure and function of the human body and specified tissues, and their integral role in maintaining homeostasis.
	Learning Objectives 1.
	<ul> <li>Potential Elements of the Performance:</li> <li>Define anatomy and physiology</li> <li>Explain the levels of structural organization of the human body</li> <li>Name the systems of the body and briefly state the major functions of each system</li> <li>List the functions for humans to maintain life</li> <li>List the survival needs of humans</li> <li>Explain homeostasis and give at least three examples</li> <li>State the four types of cells</li> <li>State the four types of tissues and their major subclassifications</li> </ul>



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- · Explain the major structural and functional importance of connective and muscle tissue
- · Describe anatomical position and explain why it is important to know
- · Use anatomical terminology to describe body directions, surfaces and planes of movement
- · Locate major body cavities and state the major organs in each one

### Course Outcome 2.

Demonstrate knowledge of and describe major muscle groups, bones, and joints.

### Learning Objectives 2.

Bones:

- · Identify the subdivisions of the skeleton
- · List the functions of the skeletal system
- List and describe the four major kinds of bones based on structure (long, flat, irregular etc.) and their function
- · Identify and name the bones of the skeleton

Joints:

- · Name and identify articulations/joints of the body
- · Name and identify key ligaments of the body
- Describe the structure and function of the intervertebral disc, cartilage and ligaments

Muscles:

- · Describe the structure of skeletal muscle
- Describe and identify different types of connective tissue attachments of skeletal muscles (tendons, aponeurosis etc.)
- · Explain the functions of the muscular system
- Name and locate the major muscles of the human body (with origin and insertion points of specified muscles) on a chart, diagram, and state the action of each
- State the importance of a nerve supply and exercise in keeping muscles healthy

### **Course Outcome 3.**

Demonstrate an understanding of basic anatomy and physiology of the nervous system and its role in controlling voluntary movement.



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## Learning Objectives 3.

- State the general functions of the nervous system
- · Explain the structural and functional classification of the nervous system
- State the function of neurons and neuroglia
- State the types and functions of general sensory receptors
- Explain the conduction of a nerve impulse
- Explain a reflex arc
- · Identify the parts of the Central Nervous System and briefly state their functions
- Describe the general structure of a peripheral nerve
- State and identify the major parts of the Peripheral Nervous System
- · State the functions of specified nerves, plexuses and divisions of the PNS

### Course Outcome 4.

Identify relevant surface landmarks and develop adequate palpation skills to accurately demonstrate their location.

### Learning Objectives 4.

- · Identify and palpate bones and significant bony landmarks
- · Identify and palpate key ligaments of the body
- · Identify and palpate major muscles, including origin and insertion

### Course Outcome 5.

Demonstrate an understanding of the basic structure and function of specified organs and systems.

## Learning Objectives 5.

Special Senses:

- · Identify and state the function and structures of the ear
- Identify and state the function of the structures of the eye

• Define the following terms: accommodation, astigmatism, blind spot, cataract, emmetropia, alaucoma. hvperopia. mvopia. presbvopia. refraction



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Other Systems:

• Describe the basic anatomy and physiological function of the following systems: cardiovascular system, respiratory system, digestive system, urinary system and reproductive system

Date:

Wednesday, August 30, 2017

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