



# COURSE OUTLINE

## OPA130

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<b>Course Code: Title</b>	OPA130: CLINICAL PATHOLOGY I
<b>Program Number: Name</b>	3022: OCCUP/PHYSIO/ASSIST
<b>Department:</b>	OTA/PTA ASSISTANT
<b>Semester/Term:</b>	18W
<b>Course Description:</b>	The purpose of this course is to introduce the student to the clinical presentation of common disabling conditions which are managed by Occupational Therapy and Physiotherapy. The conditions emphasized will be mainly neurological, cardiorespiratory and/or endocrine in nature. Relevant anatomy/physiology will be reviewed and/or taught prior to the student gaining familiarity with the clinical presentation of the conditions, the associated relevant pathology, and the general goals of intervention of Physiotherapy and/or Occupational Therapy.
<b>Total Credits:</b>	3
<b>Hours/Week:</b>	3
<b>Total Hours:</b>	45
<b>Prerequisites:</b>	OPA103, OPA104, OPA118
<b>Substitutes:</b>	OPA106
<b>This course is a pre-requisite for:</b>	OPA203, OPA204, OPA214, OPA215, OPA216, OPA225, OPA228
<b>Vocational Learning Outcomes (VLO's):</b>  Please refer to program web page for a complete listing of program outcomes where applicable.	<b>3022 - OCCUP/PHYSIO/ASSIST</b> #2. Participate in the effective functioning of interprofessional health care teams within the role of the therapist assistant. #4. Ensure personal safety and contribute to the safety of others within the role of the therapist assistant. #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. #9. Perform functions common to both physiotherapy and occupational therapy practices that contribute to the development, implementation and modification of intervention/treatment plans, under the supervision of and in collaboration with the occupational therapist and/or physiotherapist.

**Essential Employability Skills (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.
- #2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.
- #4. Apply a systematic approach to solve problems.
- #5. Use a variety of thinking skills to anticipate and solve problems.
- #6. Locate, select, organize, and document information using appropriate technology and information systems.
- #7. Analyze, evaluate, and apply relevant information from a variety of sources.
- #8. Show respect for the diverse opinions, values, belief systems, and contributions of others.
- #9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.
- #10. Manage the use of time and other resources to complete projects.
- #11. Take responsibility for one's own actions, decisions, and consequences.

**Course Evaluation:**

Passing Grade: 60%, C

**Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight
Module 1 Group Presentation	10%
Module 1 Quizzes	20%
Module 1 Unit Test	20%
Module 2 Group Presentation	10%
Module 2 Quizzes	20%
Module 2 Unit Test	20%

**Books and Required Resources:**

Essentials of Human Diseases and Conditions by Frazier, M and Drzymkowski, J.  
Publisher: W.B. Saunders Company Edition: 6th

Essentials of Human Anatomy and Physiology by Marieb, Elaine  
Publisher: Benjamin Cummings/Addison Wesley Longman, Inc Edition: 12th  
(from previous semester)

**Course Outcomes and Learning Objectives:****Course Outcome 1.**

Demonstrate general knowledge of relevant anatomy, physiology and neurodevelopment.

**Learning Objectives 1.**

Identify and state normal function of the major parts of the Central Nervous System, Peripheral Nervous System, Immunologic System, Endocrine System, Cardiac System and Respiratory System

Identify the stages of normal development of the central nervous system.

**Course Outcome 2.**

Demonstrate an understanding of the etiology, pathophysiology, and clinical presentation of disease, injury and disability.

**Learning Objectives 2.**

• Describe the general principles of disease and injury (alterations in normal cell function, structure, growth and differentiation, inflammation, wound healing and neoplasia) related to pathophysiology

• Describe the following conditions including the etiology, pathophysiology and clinical presentation:

Neurological Conditions

Alterations in the Peripheral Nervous System

• trigeminal neuralgia

• peripheral neuritis

• nerve entrapment syndromes: carpal tunnel syndrome, tarsal tunnel syndrome, deQuarvain's

sciatica, median, ulnar and radial nerve lesions, Bell's Palsy,

• Plexus injuries (Erb's etc.)

Traumatic and Vascular Injuries

• upper and lower motor neuron lesions

• head injury • epidural and subdural hematoma, cerebral concussion and contusion, skull fractures, coma, hypoxia

• vascular disorders • cerebrovascular accident, transient ischemic attack, aneurysms

• spinal cord injuries

• seizure disorders, epilepsy

• brain tumors

• infections • encephalitis, meningitis, poliomyelitis and postpolio syndrome, Guillain-Barre syndrome

• Reye's syndrome

Congenital or Developmental Disorders

• spina bifida • meningocele, myelomeningocele, hydrocephalus

• cerebral palsy

• muscular dystrophy, spinal muscular atrophy

• Down's Syndrome

• Pervasive Development Disorders, Autism

Disorders of Progressive Weakness or Paralysis

• myasthenia gravis

• multiple sclerosis

• amyotrophic lateral sclerosis

• parkinson's disease

• huntington's chorea

Cognitive Disorders

• Learning Disorders • developmental delay, developmental coordination disorder, attention deficit disorder

• Tic Disorders • Tourette's

• Dementia • Alzheimer's disease, vascular dementia, dementia due to head trauma

• Depression/Bipolar Disorder

• Anxiety disorders

• Schizophrenia

Diseases of the Cardio-Respiratory System:

Respiratory

• Pneumonia

• Chronic Obstructive Pulmonary Disease • bronchitis, asthma, emphysema

• Cystic Fibrosis

• Pulmonary Embolism, Hemoptysis, Atelectasis

• Pleurisy

• Pneumothorax, Hemothorax

- Flail Chest
- Pulmonary Tuberculosis
- Infectious Mononucleosis -Epstein-Barr Virus
- Adult Respiratory Distress Syndrome
- Lung Cancer, Hodgkin's Disease

#### Cardiac and Circulatory

- Coronary Artery Disease • angina pectoris, myocardial infarction
- Cardiac Arrest
- Hypertensive Heart Disease
- Congestive Heart Failure
- Cor Pulmonale
- Pulmonary Edema
- Valvular Heart Disease
- Emboli
- Arteriosclerosis. Atherosclerosis (aneurysms, phlebitis, thrombophlebitis, varicose veins, Raynaud's Disease)
- Leukemias
- Lymphatic Diseases
- Hemophilia

### Course Outcome 3.

Describe the general role of the endocrine system.

### Learning Objectives 3.

- Define the following: hormone, target organ/tissue, endocrine gland, exocrine gland
- Explain how endocrine glands are regulated
- Identify specified endocrine glands on a diagram, chart or model
- Explain the function of key hormones as they relate to the musculoskeletal system

Diseases of the Endocrine System:

- Cystic Fibrosis
- Pituitary Gland Diseases (hyperpituitarism, hypopituitarism, dwarfism, Diabetes Insipidus)
- Thyroid Gland Diseases (goiter, hyperthyroidism, hypothyroidism, cancer of the thyroid)
- Adrenal Gland Diseases (Cushing's Syndrome, Addison's Disease)
- Endocrine Dysfunction of the Pancreas (Diabetes Mellitus)

### Course Outcome 4.

Demonstrate knowledge of the clinical implications of common disabling conditions managed in Occupational Therapy and Physiotherapy.

### Learning Objectives 4.

- Explain the effect of specific conditions on normal growth and development and/or the aging process
- Identify the impact of specific conditions on the physical, psychosocial and environmental aspects of an individual's function

### Course Outcome 5.

Demonstrate knowledge of assessment, diagnosis, intervention and prognosis of specific common disabling conditions.

### **Learning Objectives 5.**

â€¢Recognize and list appropriate assessment processes and diagnostic tests.

â€¢List and describe appropriate treatment interventions, outcomes and prognosis.

â€¢Explore and describe the role of the OTA and PTA in the interdisciplinary management of different conditions.

**Date:**

Wednesday, January 24, 2018

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