

Macao Polytechnic University
Faculty of Health Sciences and Sports
Master of Science in Nursing

Module Outline

Academic Year 2022 / 2023 Semester 1

Learning Module	Advanced Pathophysiology		Class Code	NURS6102
Pre-requisite(s)	Nil			
Medium of Instruction	Chinese & English		Credit	3
Lecture Hours	45 hrs	Lab/Practice Hours	0 hrs	Total Hours 45hrs
Instructor	Meng Li Rong –Professor Lang Bin – A. Professor		E-mail	irmeng@mpu.edu.mo blang@mpu.edu.mo
Office	M726,Meng Tak Building		Telephone	85993449 85993440

Description

Pathophysiology emphasizes on discussing the mechanism and law about occurrence, process, prognosis in diseases, which is a science laying particular stress on theory at some extent. Knowledge about normal configuration and function as well as metabolism in human body should be used in pathophysiology by comprehensive analysis to understand disease. So there exists a close relationship between pathophysiology and biology, genetics, anthropotomy, histology, physiology, biochemistry, biophysics, pathology, pharmacology, immunology, microbiology.

Learning Outcomes

This study offers rationales for devising prevention and treatment of diseases. After completing the learning module, students will be able to understanding:

1. Demonstrate understanding of the general mechanism process of common diseases.
2. The pathophysiology about particular systems or organs.
3. The pathophysiology about cancer and immune diseases.

Content

1. Introduction (2 class hours)
 - 1.1 Concept of disease
 - 1.2 Disease etiology, pathogenesis and outcome
 - 1.3 Prevention of disease

2. Basic pathophysiological process. (14 class hours)
 - 2.1 Fever
 - 2.2 Disseminated intravascular coagulation
 - 2.3 Shock
 - 2.4 Stress and disease
 - 2.5 Case analysis

3. The pathophysiology about particular systems or organs. (17 class hours)
 - 3.1 Respiratory insufficiency
 - 3.2 Cardiac insufficiency
 - 3.3 Hepatic insufficiency
 - 3.4 Renal insufficiency
 - 3.5 Case analysis

4. The pathophysiology about cancer. (6 class hours)
 - 4.1 Oncogene
 - 4.2 Invasion and metastasis of cancer
 - 4.3 Pathophysiological basis of tumor biotherapy
 - 4.4 Case analysis

5. The pathophysiology about immune diseases. (6 class hours)
 - 5.1 Transplantation immunity
 - 5.2 Tumor immunity
 - 5.3 AIDS
 - 5.4 Autoimmune diseases
 - 5.5 Case analysis

Teaching Method

Lectures, video, discussion and case studies

Attendance

Attendance requirements are governed by the “Academic Regulations Governing Master’s Degree Programmes” of Macao Polytechnic University. Students who do not meet the attendance requirements for the module shall be awarded an ‘F’ grade.

Assessment

This learning module is graded on a 100 point scale, with 100 being the highest possible score and 50 the pass score.

	Item	Description	Percentage
1.	Assignment	Cases study 1 (Grace Meng)	35 %
2.	Assignment	Cases study 2 (Grace Meng)	30 %
3.	Assignment	Cases study 3 (Langbin)	35 %
		Total Percentage:	100 %

Teaching Material(s)

TextBooks

楊惠玲，潘景軒 等（主編）（2014）高級病理生理學（第2版）。北京：科學出版社。
Wang Jianzhi, Jin Huiming (Chief Editors) (2005) *Pathophysiology* (First Edition) 。
Beijing : People's Medical Publishing House

Reference

Reference Books

McPhee , S. J., [Lingappa, V. R., & Ganong, W. F.](#) (2004). *Pathophysiology of disease.*(3rd ed.). New York: McGraw-Hill.
Xie Keming , Wang Xiaochuan. *Pathophysiology Review and Self-Assessment.* (2008). Beijing :
People's Medical Publishing House