



**PEKING UNIVERSITY HEALTH SCIENCE CENTER  
- MACAO POLYTECHNIC UNIVERSITY NURSING ACADEMY (AE)  
BACHELOR OF SCIENCE IN NURSING  
LEARNING MODULE OUTLINE**

Academic Year	2025-2026	Semester	II
Module Code	NMAS2102		
Learning Module	Medical-Surgical Nursing II		
Pre-requisite(s)	Fundamental Nursing I (NFUN1101); Fundamental Nursing II (NFUN1102)		
Medium of Instruction	Chinese / English		
Credits	5	Contact Hours	75 hours (include lecture 71 hours, lab class 4 hours)
Instructor	*Dr.Hsu Mei Hua Kerry (Subject teacher) Dr. WANG Yan Dr. LANG, Bin Dr. LOK Ka In Grace Dr. LEONG Sin U Cindy	Email	<a href="mailto:kerryhsu@mpu.edu.mo">kerryhsu@mpu.edu.mo</a> <a href="mailto:ywang@mpu.edu.mo">ywang@mpu.edu.mo</a> <a href="mailto:blang@mpu.edu.mo">blang@mpu.edu.mo</a> <a href="mailto:kilok@mpu.edu.mo">kilok@mpu.edu.mo</a> <a href="mailto:suleong@mpu.edu.mo">suleong@mpu.edu.mo</a>
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**REMARK: \*SUBJECT TEACHERS**

**MODULE DESCRIPTION**

This 75-hour subject aims to provide a basic understanding of common health problems in the adult clients with medical-surgical diseases and their care. It covers the essential concepts of nursing care related to common acute or chronic illnesses, such as infectious diseases, musculoskeletal diseases, urinary diseases, neurological diseases, eye diseases, otolaryngologic diseases, hematological diseases, and oncological diseases. The definitions, pathophysiology/etiology, risk factors, clinical manifestations, diagnostic investigations, treatments principles, nursing management and health education for the clients with evidence-based information are included. The nursing process is used as the framework to develop students' clinical reasoning and judgment. Teaching strategies include lectures, case studies, discussion, audio-visuals, class exercise, as well as nursing skill laboratory sessions.



## MODULE INTENDED LEARNING OUTCOMES (ILOS)

On completion of this learning module, students will be able to:

M1.	Describe the etiology, risk factors, pathophysiology and diagnostic examinations in the adult clients with the diseases of the hematologic system, ontology, infectious, eye & otolaryngology, neurological system, musculoskeletal system and renal system.
M2.	Differentiate the signs and symptoms of common adult diseases, and illustrate the clinical manifestations, therapy and nursing intervention.
M3.	Analyse simulation case, apply nursing process and critical thinking to design appropriate nursing care plan for adult clients, includes the necessary peri-operative nursing care.
M4.	Demonstrate the nursing knowledge and skills of nursing intervention for the client with disorder of hematologic system, ontology, infectious, eye & otolaryngology, neurological system, musculoskeletal system and renal system.

These ILOs aims to enable students to attain the following Programme Intended Learning Outcomes (PILOs):

The PILOs are aligned with the Dublin descriptors, including knowledge and understanding, acquisition, application, critical judgment, communication skills, and learning skills/ability.

PILOs	M1	M2	M3	M4
P1. Demonstrate an understanding of the holistic nature of the clients' health status involving individual, family, and community aspects.	✓	✓	✓	✓
P2. Demonstrate effective communication skills and the ability to establish and maintain a therapeutic relationship with clients.		✓	✓	✓
P3. Demonstrate acquisition, mastery and an application of knowledge and skills for nursing practice, including biological sciences, social sciences and humanities, by making appropriate clinical reasoning and performing safe and therapeutic practice.	✓	✓	✓	✓
P4. Demonstrate the ability to maintain legal and ethical standards of nursing practice.	✓	✓	✓	✓
P5. Demonstrate the ability to carry out relevant research and contribute to the health of the community.			✓	✓
P6. Work effectively and efficiently alone or in teams.			✓	✓
P7. Demonstrate the ability to identify and evaluate health care issues.	✓	✓	✓	✓
P8. Demonstrate a critical judgment and apply the principles of evidence-based practice to the delivery of nursing care.	✓	✓	✓	✓



**MODULE SCHEDULE, COVERAGE AND STUDY LOAD**

Week	Content Coverage	Contact Hours
1-2	<p>1. Hematologic system disorders</p> <p>1.1 Introduction, assessment &amp; diagnostic tests of hematologic system. Care of client undergoing bone marrow transplantation. (2 class hours)</p> <p>1.2 Anaemia: classification, pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching (2 class hours)</p> <p>1.3 White Blood Cells disorders, leukemia: classification, pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours).</p> <p>1.4 Thrombocytopenic purpura, DIC, haemophilia: classification, pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching (2 class hours)</p> <p><b>(COMPREHEND:</b> compare pathophysiology and clinical manifestations of hematologic system disorder.  <b>UNDERSTAND:</b> memorize clinical manifestations of hematologic system disorder.  <b>MASTER:</b> apply knowledge to analyze problems in hematologic system disorder, bone marrow transplantation &amp; bone marrow puncture. Make correct nursing diagnosis and nursing intervention.)</p>	8 hours
2-3	<p>2. Oncology care:</p> <p>2.1 Oncology: introduction &amp; hospice care, radiation therapy care &amp; chemotherapy immunotarget therapy: introduction, classification, pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours).</p> <p>2.2 Lung cancer: classification, mechanism, side effects and prevention, palliative care for clients with cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p>2.3 Cancer of the esophagus: classification, mechanism, side effects and prevention, palliative care for clients with</p>	16 hours



Week	Content Coverage	Contact Hours
	<p>cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p>2.4 Gastric cancer, colorectal cancer: classification, mechanism, side effects and prevention, palliative care for clients with cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p>2.5 Liver neoplasms &amp; pancreatic cancer: classification, mechanism, side effects and prevention, palliative care for clients with cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p>2.6 Breast cancer: classification, mechanism, side effects and prevention, palliative care for clients with cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p>2.7 Bone Tumor, multiple myeloma: classification, mechanism, side effects and prevention, palliative care for clients with cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p>2.8 Lymphoma, Brain Tumor: classification, mechanism, side effects and prevention, palliative care for clients with cancer. The nurse's role and function in oncology therapy. (2 class hours).</p> <p><b>(COMPREHEND:</b> compare classification, pathophysiology and clinical manifestations of different tumors. compare classification and method of radiation therapy and chemotherapy. <b>UNDERSTAND:</b> memorize clinical manifestations of different tumors. Describe side effect of radiation therapy and chemotherapy. <b>MASTER:</b> apply knowledge to analyze problems in tumor. Make correct nursing diagnosis and nursing intervention.)</p>	
4	<p>3. Infectious disorder</p> <p>3.1 Introduction, pathogenesis and infection control: IDENTIFICATION: the definition of infection. COMPREHENSION: the process of infection, risk of hospitalization. APPLICATION: prevent and control infection. (2 class hours)</p> <p>3.2 Acquired immunodeficiency syndrome: IDENTIFICATION: definition, etiology and risk factors. COMPREHENSION: classification, clinical manifestations, treatments, nursing assessment, nursing diagnosis, nursing interventions and health education. APPLICATION: apply knowledge to analyze the clinical case of AIDS and make a reasonable nursing care plan. (2 class hours)</p>	4 hours
4	<p>4. Eye Disorders &amp; otolaryngologic disorders</p> <p>4.1 Eye disorders: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing</p>	4 hours



Week	Content Coverage	Contact Hours
	<p>assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>4.2 Otolaryngologic disorders: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p><b>(COMPREHEND:</b> compare pathophysiology and clinical manifestations of cataract. <b>UNDERSTAND:</b> memorize clinical manifestations of cataract. <b>MASTER:</b> apply knowledge to analyze problems in cataract. Make correct nursing diagnosis and nursing intervention.)</p>	
5-6	<p>5. Neurological System Disorder</p> <p>5.1 Introduction, assessment &amp; diagnostic tests of neurological system. (2 class hours)</p> <p>5.2 Head Injury &amp; Increased Intracranial Pressure (IICP): pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>5.3 Spinal Cord Injury (SCI) &amp; Seizure: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>5.4 Cerebrovascular Accident (CVA): classification, pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>5.5 Meningitis, Parkinson's Disease &amp; Alzheimer's Disease: classification, pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours).</p> <p><b>(COMPREHEND:</b> compare pathophysiology and clinical manifestations of neurological system disorder. <b>UNDERSTAND:</b> memorize clinical manifestations of neurological system disorder. <b>MASTER:</b> apply knowledge to analyze problems in neurological system disorder. Make correct nursing diagnosis and nursing intervention.)</p>	10 hours
6-7	<p>6. Musculoskeletal system</p> <p>6.1 Musculoskeletal system: introduction, assessment &amp; diagnostic tests: <b>IDENTIFICATION:</b> structure and function</p>	10 hours



Week	Content Coverage	Contact Hours
	<p>of musculoskeletal system. <b>COMPREHENSION:</b> mechanism of complications, nursing assessment and diagnostic tests. (2 class hours)</p> <p>6.2 Limb fracture: <b>IDENTIFICATION:</b> definition, etiology and risk factors. <b>COMPREHENSION:</b> classification, clinical manifestations, treatments, nursing assessment, nursing diagnosis, nursing interventions and client teaching. <b>APPLICATION:</b> apply knowledge to analyze the clinical case of limb fracture and make a reasonable nursing care plan. (2 class hours)</p> <p>6.3 Suppurative osteomyelitis: <b>IDENTIFICATION:</b> definition, etiology and risk factors, pathophysiology. <b>COMPREHENSION:</b> classification, clinical manifestations, treatments, nursing assessment, nursing diagnosis, nursing interventions and client teaching. <b>APPLICATION:</b> apply knowledge to analyze the clinical case of suppurative osteomyelitis, make a reasonable nursing care plan. (2 class hours)</p> <p>6.4 Prolapse of lumbar intervertebral disk: <b>IDENTIFICATION:</b> etiology and risk factors, pathophysiology, classification. <b>COMPREHENSION:</b> clinical manifestations, treatments, nursing assessment, nursing diagnosis, nursing interventions and client teaching. <b>APPLICATION:</b> apply knowledge to analyze the clinical case of prolapse of lumbar intervertebral, make a reasonable nursing care plan. (2 class hours)</p> <p>6.5 Total hip replacement, cast care &amp; traction: <b>IDENTIFICATION:</b> definition and classification. <b>COMPREHENSION:</b> clinical manifestations, treatments, nursing assessment, nursing diagnosis, nursing interventions and client teaching. <b>APPLICATION:</b> apply knowledge to analyze the clinical case of total hip replacement, cast care and traction, make a reasonable nursing care plan. (2 class hours)</p>	
8-9	<p>7. Renal System</p> <p>7.1 Introduction, assessment &amp; diagnostic tests of renal system. (2 class hours)</p> <p>7.2 Benign prostatic hypertrophy: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>7.3 Urolithiasis, urinary tract infection: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p>	15 hours



Week	Content Coverage	Contact Hours
	<p>7.4 Acute &amp; chronic glomerulonephritis: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>7.5 Nephrotic syndrome: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>7.6 Renal failure: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (2 class hours)</p> <p>7.7 Kidney tumors, bladder tumors, prostate tumors: pathophysiology, etiology, risk factors, clinical manifestations, diagnostic investigations, nursing assessment, surgical and medical treatments, nursing diagnosis, nursing intervention, nursing aim and client teaching. (3 class hours)</p> <p><b>(COMPREHEND:</b> compare pathophysiology and clinical manifestations of renal system disorder. <b>UNDERSTAND:</b> memorize clinical manifestations of renal system disorder. <b>MASTER:</b> the clinical manifestations and apply knowledge to analyze problems in renal system. Make correct nursing diagnosis and nursing intervention.)</p>	
6	<p>Lab skill practice I: Simulation for neurological function assessment and nursing care for Neurological function assessment: log roll, neck collar, GCS, transportation and immobilization. (MASTER: students correctly demonstrate the skills, health assessment- state of consciousness through Glasgow Coma Scale (GCS), transportation and immobilization of patients.)</p>	2 hours
9	<p>Lab skill practice II: Hematologic &amp; renal system nursing care for Blood testing and blood transfusion for hematologic diseases, urinary test and urinary catheterization. (MASTER: students correctly demonstrate the skills for health assessment in hematologic &amp; renal system and skills, such as tracheostomy care, blood transfusion, and urinary test.)</p>	2 hours
13	Midterm	2 hours
15	Final exam	2 hours
	Total	75Hours



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## TEACHING AND LEARNING ACTIVITIES

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

Teaching and Learning Activities	M1	M2	M3	M4
T1. Lectures	✓	✓	✓	
T2. Case analyse	✓	✓	✓	✓
T3. Group discussion	✓	✓	✓	✓
T4. Nursing skill demonstration and practice in nursing laboratory			✓	✓
T5. Role play			✓	✓

## ATTENDANCE

Attendance requirements are governed by the Academic Regulations Governing Bachelor's Degree Programmes of the Macao Polytechnic University.

Students who do not meet the attendance requirements for the learning module shall be awarded an 'F' grade.

Students are not eligible to attend the final examination and re-sit examination, moreover, an "F" will be given as the final grade to students who have less than the stated attendance for the enrolled module.

## ASSESSMENT

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

In this learning module, assessment includes four aspects: Test (35%), Final exam (35%), Skill exam (20%) and class performance/assignment (10%).

Students are required to complete the following assessment activities:

Assessment Activities	Weighting (%)	ILOs to be Assessed
A1. Mid-term Test (close-book) (Wang 1-10, Hsu 1-7)	35%	M1, M2, M3
A2. Final Examination (close book) (Wang 11, Hsu 8-11, Lang 1-7, Lok 1-4)	35%	M1, M2, M3
A3. Individual Nursing Skill Examination	20%	M4
A4. Class performance and assignments (individual or group)	10%	M1, M2, M3, M4
Total	100%	

The assessment will be conducted following the University's Assessment Strategy (see [www.mpu.edu.mo/teaching\\_learning/en/assessment\\_strategy.php](http://www.mpu.edu.mo/teaching_learning/en/assessment_strategy.php)).

Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.



## MARKING SCHEME

Assessment Activities	Assessment Criteria	Mark Ranges				
		88-100 High	73-87 Signification	58-72 Moderate	50-57 Basic	<50 Fail
A1. Mid-term Test	Demonstrate the ability to identify and apply appropriate concepts, methods and techniques	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Not reaching marginal levels
A2. Final Examination	Demonstrate the ability to identify and apply appropriate concepts, methods and techniques	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Not reaching marginal levels
A3. Individual Nursing Skill Examination	Demonstrate the ability to identify and apply appropriate nursing skills or intervention for special situation and scenario	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Not reaching marginal levels
A4. 4.1 Class learning performance 4.2 Assignments (individual or group)	4.1 Demonstrate the understanding of the module covered in classes and show active learning attitude. 4.2 Demonstrate the ability to complete individual or group assignment, answer questions on the topics covered in the module.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Not reaching marginal levels

## TEXTBOOK

戴紅霞、李曉丹 (2025)。內外科護理學II (PDF)。澳門：澳門理工大學出版社。

## REQUIRED READINGS



Janice L. Hinkle, Kerry H. Cheever (2025). *Brunner & Suddarth's textbook of medical-surgical nursing* (16<sup>th</sup> ed.). Philadelphia: Wolters Kluwer.

## REFERENCES

Lewis S.L., Sandstrom S.A. & Bucher L. (2023). *Medical-Surgical Nursing: Assessment and Management of Clinical Problems* (12<sup>th</sup> ed.). St. Louis: Mosby.

Lewis S.L., Sandstrom S.A. & Bucher L. (2023). *Study Guide for Medical-Surgical Nursing: Assessment and Management of Clinical Problems* (12<sup>th</sup> ed.). St. Louis: Mosby.

Mariann M. Harding, Jeffrey Kwong, Debra Hagler. (2022). *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems*, Single Volume (12<sup>th</sup> ed). St. Louis: Elsevier.

尤黎明, 吳瑛 (2021)。《內科護理學 (第7版)》。北京：人民衛生出版社。

李樂之、路潛 (2021)。《外科護理學 (第7版)》。北京：人民衛生出版社。

莊琬荃 (譯) (2024)。《NANDA International 護理診斷：定義與分類 2024~2026 (10版)》。台灣：華杏。

戴紅霞、李曉丹 (2024)。《內外科護理學I (PDF)》。澳門：澳門理工大學出版社。

## STUDENT FEEDBACK

At the end of every semester, students are invited to provide feedback on the learning module and the teaching arrangement through questionnaires. Your feedback is valuable for instructors to enhance the module and its delivery for future students. The instructor and programme coordinators will consider all feedback and respond with actions formally in the annual programme review.

## ACADEMIC INTEGRITY

The Macao Polytechnic University requires students to have full commitment to academic integrity when engaging in research and academic activities. Violations of academic integrity, which include but are not limited to plagiarism, collusion, fabrication or falsification, repeated use of assignments and cheating in examinations, are considered as serious academic offenses and may lead to disciplinary actions. Students should read the relevant regulations and guidelines in the Student Handbook which is distributed upon the admission into the University, a copy of which can also be found at [www.mpu.edu.mo/student\\_handbook/](http://www.mpu.edu.mo/student_handbook/).



## Content

NO.	Content	Teacher
1	Hematologic system: introduction, assessment & diagnostic tests	Hsu 1
2	Anemia	Wang 1
3	Thrombocytopenic purpura, DIC, hemophilia	Wang 2
4	White blood cells disorders & leukemia	Hsu 2
5	Lung cancer	Wang 3
6	Breast cancer	Wang 4
7	Oncology introduction, treatment, and nursing care	Hsu 3
8	Bone Tumor, multiple myeloma	Hsu 4
9	Nasopharyngeal carcinoma, cancer of the esophagus	Wang 5
10	Lymphoma, Brain Tumor	Hsu 5
11	Gastric cancer, colorectal cancer	Wang 6
12	Liver neoplasms & pancreatic cancer	Wang 7
13	Introduction, pathogenesis & infection control	Wang 8
14	AIDS	Wang 9
15	Cataract, glaucoma, conjunctivitis	Hsu 6
16	Sinusitis, otitis media, Meniere's syndrome	Wang 10
17	Parkinson's disease, Alzheimer's disease	Hsu 7
18	Neurologic system: assessment, diagnostic tests	Hsu 8
19	Head injuries and increased intracranial pressure (IICP)	Hsu 9
20	Cerebrovascular accident	Hsu 10
21	Meningitis, seizure	Hsu 11
22	<b>Simulation skill 1: Neurologic system (Cindy, Grace)</b>	Hsu 12
23	Musculoskeletal system: introduction, assessment & diagnostic tests	Wang 11
24	Limb fracture	Lok 1
25	Suppurative osteomyelitis	Lok 2
26	Prolapse of lumbar intervertebral disk	Lok 3
27	Total hip replacement, cast care & traction	Lok 4
28	Urinary system: assessment & diagnostic tests	Lang 1
29	Benign prostatic hyperplasia	Lang 2



NO.	Content	Teacher
30	Urolithiasis, urinary tract infection	Lang 3
31	Acute & chronic glomerulonephritis	Lang 4
32	Renal failure	Lang 5
33	<b>Simulation skill 2: Hematologic &amp; Renal system (Kerry, Grace)</b>	Wang 12
34	Nephrotic syndrome	Lang 6
35	Kidney tumors, bladder tumors, prostate tumors (3H)	Lang 7
36	Mid-Term Test	Teacher
37	<b>Final Exam</b>	Teacher