



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

Academic Year	2024-2025	Semester	II
Module Code	CCEN3102		
Learning Module	Critical Care and Emergency Nursing		
Pre-requisite(s)	Medical -Surgical Nursing I (NMAS2101) Medical -Surgical Nursing II (NMAS2102)		
Medium of Instruction	Chinese /English		
Credits	3	Contact Hours	45 H (41 hours of theory, 4 hours of lab)
Instructor	Pro.LI Baohua(Subject teacher) Dr.ZHENG Kang Ms.MA Li Mr.LI Yuxuan Ms.LIU Congying Ms.LI Fan	Email	zhengkang@bjmu.edu.cn liucongying@bjmu.edu.cn lifan2021@bjmu.edu.cn
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MODULE DESCRIPTION 學科單元/科目概述

Emergency and critical care nursing is a highly professional and comprehensive nursing course. Students are required to complete courses in basic medicine, basic nursing, and both internal and external nursing before undertaking this module. The curriculum encompasses emergency and critical care, emphasizing the latest theories and technologies both domestically and internationally. Through this course, students will acquire the fundamental knowledge and skills necessary for work in intensive care units and emergency rooms. They will develop professional and distinctive logical thinking, become familiar with clinical nursing methods in this field, and attain preliminary competencies in emergency and critical care nursing.

MODULE INTENDED LEARNING OUTCOMES (ILOS) 學科單元/科目預期學習成效

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

M1.	To identify life-threatening situation in critical care and emergency nursing
M2.	To understand aetiology, risk factors, pathophysiology, clinical manifestations, diagnostic investigations, rescue treatment principles, nursing management, and health education related to emergent or emergent critical illness
M3.	To understand the usage principles of apparatus and machines in the emergency room and critical care unit
M4.	To describe the skills of resuscitation in emergency nursing and the monitoring and supporting techniques in critical care
M5.	To exercise critical thinking in caring for clients in emergent and critical situations



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 課程預期學習成效	M1	M2	M3	M4	M5
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 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 community's health.		✓		✓	
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 deliver nursing care.		✓	✓	✓	✓

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week 週	Content Coverage 涵蓋內容	Contact Hours
1	Overview of Critical Care, Emergency Nursing and disaster nursing - The definition of Emergency nursing - Emergency medical services - The definition of Critical nursing - The definition of Disaster nursing	2
2	Triage and nursing evaluation in ER - Triage in Emergency Department/Room (ED/ER) - The ER nurse's role in patient assessment and triage	2
3	Heat-related emergency, drowning and mountain sickness - Pathophysiology and etiology - Clinical manifestations	2



	<ul style="list-style-type: none"> - Diagnostic investigations - Fast responses and ER treatments, - Nursing assessment, nursing diagnosis, nursing intervention - Health education for patients 	
4	<p>Acute Poisoning</p> <ul style="list-style-type: none"> - Classification and conception - Pathophysiology, etiology, and risk factors - Clinical manifestations - Diagnostic investigations - Surgical and medical treatments - Nursing diagnosis and intervention - Health education for patients 	2
5	<p>Burns care</p> <ul style="list-style-type: none"> - Classifications and degrees - Pathophysiology, etiology, and risk factors - Clinical manifestations - Surgical and medical treatments - Nursing diagnosis and intervention - Health education for patients. 	2
6	<p>Artificial airway , Heimlich Maneuver ,cardioversion</p> <ul style="list-style-type: none"> - Identify emergency airway management including the use of Bag-Mask-Ventilation, oropharyngeal and nasopharyngeal airways. - Describe the establishment and maintenance of the airway. - Describe the Heimlich Maneuver of definition, indications, nursing management, and skills. - Explain the cardioversion of definition, risk factors, cardiopulmonary resuscitation, and nursing roles. 	2
7	<p>BLS, ACLS, pharmacy in ER and ICU</p> <ul style="list-style-type: none"> -Explain the Basic Life Support (BLS) definition, risk factors, cardiopulmonary resuscitation, and nursing roles. - Describe the Basic Life Support (BLS) and the Advanced Cardiovascular Life Support (ACLS) specific assessment and management that occurs with each step of the systematic approach. - Describe the indications, contraindications, doses, and routes of administration for drugs. - Recommended for specific dysrhythmias and cardiac arrest. 	3



8	Practices 1: CPR、defibrillation	2
9	Mid-term test	2
10	Patient assessment and monitoring of organ function-1 - Neurological functions - Hepatic functions	2
11	Patient assessment and monitoring of organ function-2 - Cardiovascular functions - Renal functions - Respiratory functions	2
12	SIRS、Sepsis and MODS - Definitions - Etiology - Risk factors - Analyze mechanisms, pathophysiology - Clinical manifestations. - Diagnoses, and caring principles - Health education for patients	2
13	Practices 2: Nursing evaluation of critical/emergent patients in simulated scenarios	2
14	Nutrition support in ICU - Parenteral nutrition - Enteral nutrition - The impact of critical illness on bowel function	2
15	Pain management and sedation in ICU - The definitions, types, and responses to pain - Assessment, diagnoses, and caring principles of pain and sedation - Health education for patients	2
16	Techniques and machines in ICU-1 - The nurses' roles, functions, and special skills and equipment in ICU - Essential equipment in ICU: respiratory machine and mechanical ventilation	2
17	Techniques and machines in ICU-2 - Special therapies and care in ICU - Invasive arterial blood pressure monitoring, pulmonary artery catheter, temporary pacing, intracranial pressure monitoring, and extracorporeal membrane oxygenation	2



18	Complications in critical patients <ul style="list-style-type: none">- Deep venous thrombosis- Skin breakdown- Sleep pattern disturbance- Hospital-acquired infections- Psychosocial impact: delirium, depression, anxiety	2
19	Head trauma, spine cord trauma <ul style="list-style-type: none">- Mechanism, definition and category, etiology, risk factors- Clinical manifestations, diagnostic investigations- Nursing assessment and fast responses- Surgical and medical treatments,- Nursing diagnosis, nursing intervention, nursing aim- Health education for patients	2
20	Multiple and complex trauma <ul style="list-style-type: none">- Mechanism of injury, definition and category, etiology, risk factors- Clinical manifestations, diagnostic investigations- Nursing assessment through primary and secondary survey- Surgical and medical treatments- Nursing diagnosis, nursing intervention, nursing aim- Health education for patients	2
21	Continuous blood purification, peritoneal dialysis <ul style="list-style-type: none">- Hemodialysis- Continuous renal replacement therapy (CRRT)- Peritoneal Dialysis- Therapeutic methods, nursing assessment, nursing diagnosis, nursing intervention- Health education for patients	2
22	Final examination	2
	Total	45 hrs



TEACHING AND LEARNING ACTIVITIES

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities: 修讀本學科單元/科目，學生將透過以下教與學活動取得預期學習成效

Teaching and Learning Activities	M1	M2	M3	M4	M5
T1. Interactive Lectures	✓	✓	✓	✓	✓
T2. In-class discussions	✓	✓	✓	✓	✓
T3. In-class group activities	✓	✓	✓	✓	✓
T4. Nursing skill practice through simulated scenarios-lab class		✓	✓	✓	✓

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.

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, students are required to complete the following assessment activities:

Assessment Activities	Weighting (%)	ILOs to be Assessed (M1,M2,M3,M4,M5)
A1. Class performance: average score from all teachers	10	M1,M2,M3,M4,M5
A2. Class performance: two practicing classes	20	M1,M2,M3,M4,M5
A3. Mid-term test: this is a close-book exam	35	M1,M2,M3,M4,M5
A4. Final exam: this is a close-book exam.	35	M1,M2,M3,M4,M5

The assessment will be conducted following the University's Assessment Strategy (see 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 (評分準則)

Assessment Activities	Assessment Criteria	Mark Ranges				
		88-100 High	73-87 Signification	58-72 Moderate	50-57 Basic	<50 Fail
A1.Class performance	Demonstrate an understanding of the module covered in classes and show an active learning attitude.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Not reaching marginal levels
A2.Class performance : two practicing classes.	Demonstrate an understanding of the module covered in classes and show an active learning attitude.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Not reaching marginal levels
A3. 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
A4. 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

REQUIRED READINGS 書單

鐘清玲，許虹 (2019) .*急危重症護理學 (雙語)* (第2版) . 北京:人民衛生出版社.



REFERENCES 參考文獻

李慶印、左選琴，孫紅（主譯）(2021).*ACCCN 重症護理*(第3版). 北京:人民衛生出版社.

李文濤、崔巧玲(2018). *急危重症護理學*. 北京: 科學出版社.

桂莉、金靜芬(2022).*急危重症護理學*(第5版). 北京:人民衛生出版社.

張波、桂莉（2017）. *急危重症護理學*（第4版）.北京:人民衛生出版社.

Aitken Leanne、Marshall Andrea、Chaboyer Wendy（主編）；李慶印、左選琴、孫紅譯(2021)。

ACCCN 重症護理(第3版). 北京：人民衛生出版社。

Emergency Nurses Association Suzanne Burns (2024). *Sheehy's Emergency Nursing: Principles and Practice (English)* (8th ed.). Mosby.

Emergency Nurses Association Suzanne Burns (2023). *AACN Essentials of Critical Care Nursing (English)* (5th ed.). McGraw-Hill Education / Medical.

STUDENT FEEDBACK

At the end of each 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/.



Time table 1 (3A)

Session	Date	Time	Contact hours	Topic	Teacher
1	2025/2/25	10:00-12:00	2	Overview of Critical Care , Emergency Nursing and disaster nursing	LI Baohua
2	2025/2/26	13:00-15:00	2	Triage and nursing evaluation in ER	MA Li
3	2025/2/28	10:00-12:00	2	Heat-related emergency, drowning and mountain sickness	MA Li
4	2025/3/4	10:00-12:00	2	Acute Poisoning	MA Li
5	2025/3/5	13:00-15:00	2	Burns care	LI Baohua
6	2025/3/7	10:00-12:00	2	Artificial airway ,Heimlich Maneuver ,cardioversion	ZHENG Kang
7	2025/3/11	8:00-11:00	3	BLS , ACLS , pharmacy in ER and ICU	ZHENG Kang
8	2025/3/12	9:00-11:00	2	Practices 1:CPR and defibrillation	ZHENG Kang
9	2025/3/14	10:00-12:00	2	Mid-term test	LI Baohua
10	2025/3/18	10:00-12:00	2	Patient assessment and monitoring of organ function-1	LIU Congying
11	2025/3/19	13:00-15:00	2	Patient assessment and monitoring of organ function-2	LIU Congying
12	2025/3/21	10:00-12:00	2	SIRS 、Sepsis and MODS	LI Yuxuan
13	2025/3/25	10:00-12:00	2	Practices 2:Nursing evaluation of critical/emergent patients in simulated scenarios	LI Yuxuan/ MA Li
14	2025/3/26	13:00-15:00	2	Techniques and machines in ICU-1	LIU Congying
15	2025/3/28	10:00-12:00	2	Techniques and machines in ICU-2	LIU Congying
16	2025/3/31	15:00-17:00	2	Nutrition support in ICU	LI Yuxuan
17	2025/4/1	10:00-12:00	2	Pain management and sedation in ICU	LI Yuxuan
18	2025/4/2	13:00-15:00	2	Complications in critical patients	LI Fan
19	2025/4/7	15:00-17:00	2	Head trauma, spine cord trauma	LI Fan
20	2025/4/8	10:00-12:00	2	Multiple and complex trauma	LI Fan
21	2025/4/9	13:00-15:00	2	Continuous blood purification, peritoneal dialysis	LI Yuxuan
22	2025/4/14	9:00-11:00	2	Exam	LI Baohua



Time table 2 (3B)

Session	Date	Time	Contact hours	Topic	Teacher
1	2025/2/25	8:00-10:00	2	Overview of Critical Care , Emergency Nursing and disaster nursing	LI Baohua
2	2025/2/26	15:00-17:00	2	Triage and nursing evaluation in ER	MA Li
3	2025/2/28	8:00-10:00	2	Heat-related emergency, drowning and mountain sickness	MA Li
4	2025/3/4	8:00-10:00	2	Acute Poisoning	MA Li
5	2025/3/5	15:00-17:00	2	Burns care	LI Baohua
6	2025/3/7	8:00-10:00	2	Artificial airway ,Heimlich Maneuver ,cardioversion	ZHENG Kang
7	2025/3/10	8:00-11:00	3	BLS , ACLS , pharmacy in ER and ICU	ZHENG Kang
8	2025/3/12	9:00-11:00	2	Practices 1:CPR and defibrillation	ZHENG Kang
9	2025/3/14	8:00-10:00	2	Mid-term test	LI Fan
10	2025/3/18	8:00-10:00	2	Patient assessment and monitoring of organ function-1	LIU Congying
11	2025/3/19	15:00-17:00	2	Patient assessment and monitoring of organ function-2	LIU Congying
12	2025/3/21	8:00-10:00	2	SIRS 、Sepsis and MODS	LI Yuxuan
13	2025/3/25	8:00-10:00	2	Practices 2:Nursing evaluation of critical/emergent patients in simulated scenarios	LI Yuxuan/MA Li
14	2025/3/26	15:00-17:00	2	Techniques and machines in ICU-1	LIU Congying
15	2025/3/28	8:00-10:00	2	Techniques and machines in ICU-2	LIU Congying
16	2025/3/31	13:00-15:00	2	Nutrition support in ICU	LI Yuxuan
17	2025/4/1	8:00-10:00	2	Pain management and sedation in ICU	LI Yuxuan
18	2025/4/2	15:00-17:00	2	Complications in critical patients	LI Fan
19	2025/4/7	10:00-12:00	2	Head trauma, spine cord trauma	LI Fan
20	2025/4/8	8:00-10:00	2	Multiple and complex trauma	LI Fan
21	2025/4/9	15:00-17:00	2	Continuous blood purification, peritoneal dialysis	LI Yuxuan
22	2025/4/14	9:00-11:00	2	Exam	LI Fan