

# Macao Polytechnic Institute

## Peking University Health Science Center - Macao Polytechnic

### Institute Nursing Academy

### Bachelor of Science in Nursing

#### Module Outline

Academic Year 2021 / 2022 Semester 2

<b>Learning Module</b>	Fundamental Nursing II	<b>Class Code</b>	NFUN1102		
<b>Pre-requisite(s)</b>	Nil				
<b>Medium of Instruction</b>	Cantonese / English	<b>Credit</b>	4		
<b>Lecture Hours</b>	40 hrs	<b>Lab/Practice Hours</b>	20 hrs	<b>Total Hours</b>	60 hours
<b>Instructor</b>	Dr CHAN Y. M. Cymon (Subject Teacher) JIN Xiaoyan, Associate Professor Dr PANG W. I. Phoenix Dr MIO K. W. Ruth Mr KWONG H. K. Dennis	<b>E-mail</b>	ymchan@ipm.edu.mo		
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#### Description

This module will take students to more in-depth nursing practice including health assessment, intrusive and therapeutic procedures, and caring for a dying client. The principles of scientific and systematic process of nursing practice, and nursing care plan will also be introduced. This subject emphasizes on developing the students' ability to integrate scientific knowledge and clinical practice.

## **Learning Outcomes**

After completing the module, students will be able to:

1. Understand the principles intake and output, and other related knowledge.
2. Recognize the principles and purposes of invasive treatment.
3. Demonstrate nursing interventions of invasive treatment.
4. Learn some self-concept and spiritual nursing.
5. Apply fundamental nursing skills to living situation.
6. Master theoretical knowledge of fundamental nursing during clinical practicum.

## **Contents**

### 1. Evidence-Based Practice

#### 1.1 UNDERSTAND

The relationship between evidence-based practice and the improvement of the safety and quality of nursing practice, the steps of evidence-based practice, the levels of evidence in the literature, how critiquing the scientific literature leads to best evidence for practice changes, the ways to apply evidence in nursing practice, the ways to measure outcomes for an evidence-based practice change, the ways to sustain knowledge in evidence-based practice, the relationship among nursing research, evidence-based practice, and quality improvement.

### 2. Critical Thinking

#### 2.1 UNDERSTAND

The characteristics of a critical thinker, the importance of clinical judgment in a nurse's ability to make clinical decisions, how reflection improves clinical decision making, the components of a critical thinking model for clinical decision making, the critical thinking skills used in nursing practice, the critical thinking attitudes used in clinical decision making, how experience and professional standards influence a nurse's critical thinking, the relationship of the nursing process to critical thinking.

### 3. Patient Education

#### 3.1 UNDERSTAND

The topics for a patient's health education needs, the concepts of teaching and learning, a nurse's role in teaching and learning, the domains of learning, the difference between readiness to learn and ability to learn, how to apply the nursing process to the process of teaching, the characteristics of an environment that promotes learning, the principles of effective teaching and learning, how to incorporate a patient's culture into the teaching plan of care, the ways to adapt teaching approaches for patients with low health literacy, how to determine a patient's readiness to learn, the ways to incorporate teaching with routine nursing care, identify methods for evaluating learning, how to use the teach-back method, the appropriate documentation of teaching and learning.

### 4. Drug Administration, administering Injections

#### 4.1 UNDERSTAND

The drug nomenclature and pharmacokinetics of drug action, the components of a medication order, identify the three times and five rights for medication administration, discuss the nurse's responsibility, compute the calculating medication dosages, the differentiate among different routes of medication action, how to prepare medication from ampules and vial.

### 5. Administering Medications

#### 5.1 UNDERSTAND

Identify the characteristics of adverse drug events, discuss nursing roles and responsibilities in medication administration, compare and contrast the roles of the health care provider, pharmacist, and nurse in medication administration; discuss legal responsibilities in medication administration, compare and contrast the different types of medication effects and reactions, the factors that influence medication actions, the factors to include in assessing a patient's needs for and response to medication therapy, implement nursing actions to prevent medication errors, the factors to consider when choosing routes of medication administration, the calculate prescribed medication doses correctly, the six rights of medication administration and apply them in clinical practice, the methods used to educate patients and family caregivers about prescribed medications, the correctly and safely prepare and administer medications.

## 6. Fluid, Electrolyte and Acid-Base Balances

### 6.1 UNDERSTAND

The basic physiological mechanisms that maintain fluid, electrolyte, and acid-base balances, the risk factors for fluid, electrolyte, and acid-base imbalances, the fluid, electrolyte, and acid-base imbalances, the appropriate clinical assessments for specific fluid, electrolyte, and acid-base imbalances, the appropriate nursing interventions for patients with fluid, electrolyte, and acid-base imbalances, the purpose and procedures for initiation and maintenance of intravenous therapy, the calculate an intravenous flow rate, the complications of intravenous therapy and what to do if they occur, how to change intravenous solutions, tubing, and dressings, the procedure for initiating a blood transfusion and complications of blood therapy.

## 7. Caring

### 7.1 UNDERSTAND

The role that caring plays in building nurse–patient relationships, the commonalities among theories of caring, the evidence about patients' perceptions of caring, how caring principles influence nurses' decision making, the ways to express caring through presence and touch, the therapeutic benefit of listening to patients, how health care institutions stress the importance of caring practices in achieving patient satisfaction, the relationship between knowing a patient and clinical decision making.

## 8. Cultural Competence

### 8.1 UNDERSTAND

The concepts of cultural awareness, cultural knowledge, cultural skill, cultural encounters and cultural desire in the cultural competence model, the social and cultural influences in health and illness, the health disparity and the social determinants that affect it, the role communication plays in developing cultural competence, the approaches to use in conducting a cultural nursing history and physical assessment, how teach back helps a patient with limited health literacy, the principles to apply when using an interpreter.

## 9. Spiritual Health

### 9.1 UNDERSTAND

The relationship among faith, hope, and spiritual well-being, compare and contrast the concepts of religion and spirituality, the relationship of spirituality to an individual's total being, how to assess a patient's spirituality and spiritual health, the nursing interventions designed to promote spiritual health, to establish presence with patients, to evaluate how patients attain spiritual health.

## 10. Growth and Development

### 10.1 UNDERSTAND

The frameworks for growth and development as described by major developmental theorists, the difference between growth and development, the growth and development changes that occur in individuals from conception through old age, the factors that promote or interfere with normal growth and development of individuals at each stage of life, the physical and psychosocial health concerns of infants, children, adolescents, and adults, the developmental theories when planning intervention in the care of patients across the life span, the specific nursing interventions for the health promotion of patients across the life span, the critical thinking skills to determine appropriate teaching topics for individual patients across the life span.

## 11. Self-concept and Sexuality

### 11.1 UNDERSTAND

The factors that influence the following components of self-concept: identity, body image, and role performance, how to identify stressors that affect self-concept, self-esteem, and sexuality, the components of self-concept as each relates to Erikson's developmental stages, the reflect on ways in which your self-concept and nursing actions affect your patient's self-concept and self-esteem, the role in maintaining or enhancing a patient's sexual health, how to apply the nursing process to promote a patient's self-concept and sexual health.

## 12. Family Nursing

### 12.1 UNDERSTAND

The current trends in the Macao family, how the term family is defined to reflect family diversity, the common family forms and their health implications, the way family structure and patterns of functioning affect the health of family members and the family as a whole, the interpret external and internal factors that promote family health, the compare family as context to family as patient and explain the way that these perspectives influence nursing practice, how to use the nursing process to provide for the health care needs of the family.

## 13. Stress and adaptation

### 13.1 UNDERSTAND

The three stages of the general adaptation syndrome, how stress and coping relate to health, the integration of stress theory with nursing theories, the characteristics of posttraumatic stress disorder, the stress-management techniques used in coping with stress, how to develop a care plan for a patient experiencing stress, how stress in the workplace affects nurses.

## 14. Loss and Grief

### 14.1 UNDERSTAND

The five categories of loss, the grief and loss theories, the compare and contrast types of grief, the variables that influence a person's response to grief, identify assessment parameters in a patient experiencing loss and grief, identify nursing interventions for helping patients cope with loss, death, and grief, how to develop a care plan for a patient and family members experiencing loss and grief, the principles of palliative and hospice care, the ways to educate and involve family members in providing palliative care, the steps in caring for a body after death, the role of the nurse when caring for patients at the end of life.

## 15. Oxygenation

### 15.1 UNDERSTAND

The structure and function of the cardiopulmonary system, the physiological processes of cardiac output and respiratory gas exchange, the interrelationship of cardiac output,

preload, afterload, contractility, and heart rate, the electrical conduction system of the heart, the physiological processes involved in ventilation, perfusion, and exchange of respiratory gases, the effects of a patient's health status, age, lifestyle, and environment on tissue oxygenation, how to identify and describe clinical outcomes as a result of disturbances in conduction, altered cardiac output, impaired valvular function, myocardial ischemia, and impaired tissue perfusion; the nursing interventions for promotion, maintenance, and restoration of cardiopulmonary function in the primary care, acute care, and restorative and continuing care settings, how to identify and describe clinical outcomes for hyperventilation, hypoventilation, and hypoxemia.

16. Urinary Elimination

16.1 UNDERSTAND

The structures of the urinary system, including function and role in urine formation and elimination, the factors that influence urinary elimination, the common urinary elimination alterations, the essential components to include in a nursing history from a patient with a urinary alteration, how to perform a physical assessment that focuses on urinary elimination, the characteristics of normal and abnormal urine, the nursing responsibilities associated with common diagnostic tests of the urinary system, the nursing diagnoses associated with alterations in urinary elimination, how to teach patients how to promote normal urination and control incontinence, the implement nursing measures to reduce urinary tract infections, how to apply a condom catheter and insert a urinary catheter, measure intake and output to monitor bladder emptying, renal function, and fluid and electrolyte balance, how to measure post-void residual using a bladder scan.

17. Bowel Elimination

17.1 UNDERSTAND

The physiology of digestion, absorption, and bowel elimination, the physiological and psychological factors that influence bowel elimination, the common physiological alterations in bowel elimination, how to assess a patient's bowel elimination pattern, the perform a fecal occult blood test, the nursing diagnoses related to alterations in bowel elimination, how to articulate the steps of enema administration, the process of removal of a fecal impaction, the nursing measures aimed at promoting normal elimination and defecation, the nursing care required to manage a fecal diversion.

18. Practice-Medication

18.1 MASTER

Apply the related knowledge to the nursing technique.

19. Practice- Fluid, Electrolyte and Acid-Base Balance

19.1 MASTER

Apply the related knowledge to the nursing technique.

20. Practice- Oxygenation and Bowel Elimination

20.1 MASTER

Apply the related knowledge to the nursing technique.

21. Practice-Urinary Elimination

21.1 MASTER

Apply the related knowledge to the nursing technique.

22. Practice- Skill review

22.1 MASTER

Apply the related knowledge to the nursing technique.

23. Test

24. Examination

## **Lab Practice**

Practice Item:	Demonstration of the skill technique
Students / Group:	10-25 students
Mode of Practice:	Supervision of student's practice
Practice Requirement:	Punctuality, politeness, tidy and clinical uniform with accessories.

## **Teaching Method**

Lectures, discussions, analyses, videos and student inquiries.

## **Attendance**

Attendance of the module is in accordance with the attendance stated in the 'Academic Regulations Governing Bachelor's Degree Programmes of Macao Polytechnic Institute'. Students who do not meet the attendance requirements for the module will not be permitted to sit the final and re-sit examination and shall be awarded an 'F' grade.

## **Assessment**

This module is graded on a 100 point scale, with 100 being the highest possible score and 50 the pass score. Any student scoring less than 35% of the total mark in the final examination will be given an "F" grade for the module even if the overall grade is 50% or higher. Also, students will need to take the re-sit examination if they miss the final examination due to unreasonable absence and their maximum score will be 50.

	<b>Item</b>	<b>Description</b>	<b>Percentage</b>
1.	Theoretical Test	Written	30 %
2.	Final Examination	Written	30 %
3.	Skill Examination	Full attendance of nursing skill class	30 %
4.	Compulsory Skill Practice	At least six hours a week and skill practice video, greater than or equal to 60 hours ( $\geq 60$ hours). A one-off video shot for each nursing skill performance Individual video for skill practice achievement.	5 %
5.	Learning Attitude	Mission and contribution etc.	5 %
		<b>Total Percentage:</b>	<b>100 %</b>

## **Teaching Material(s)**

### **Textbook(s)**

Potter, P. A., Perry, A. G., Stockert, P. A. & Hall, A. (2019). *Essentials for Nursing Practice*, 9<sup>th</sup> edition. Elsevier.

### **Reference book(s)**

楊立群、高國貞主編 (2018)。 *基礎護理學*，第二版。北京：人民衛生出版社。

Alfaro-Lefevre, R. (2014). *Applying Nursing Process: The Foundation for Clinical Reasoning*, 8<sup>th</sup> edition. Lippincott Williams & Wilkins.

Berman, A., Snyder, S. J. & Frandsen, G. (2016). *Kozier & Erb's Fundamentals of Nursing Concepts, Process, and Practice*. 10<sup>th</sup> edition. Pearson.

Callahan, B. (2015). *Clinical Nursing Skills: A Concept-Based Approach Volume III*, 2nd Edition. Pearson.

Cooper, K. & Gosnell, K. (2018). *Foundations of Nursing*, 8<sup>th</sup> edition. Elsevier.

Craven, R. F. (2020). *Fundamentals of Nursing: human health and function*, 9<sup>th</sup> edition. Lippincott Williams & Wilkins.

Gauwitz, D. F. (2014). *Administering Medications*, 8<sup>th</sup> edition. McGraw-Hill Education.

Lippincott (2013). *Lippincott's Nursing Procedures*, 6<sup>th</sup> edition. Lippincott Williams & Wilkins.

Lynn P. (2019). *Taylor's Clinical Nursing Skills*, 5<sup>th</sup> edition. Wolters Kluwer.

Nelson R & Staggers N. (2018). *Health Informatics*, 2<sup>nd</sup> edition. Elsevier.

Perry A, Potter P. & Ostendorf W. (2018). *Clinical Nursing Skills and Techniques*, 9<sup>th</sup> edition. Elsevier.

Timby, B. K. (2013). *Fundamental Nursing Skills and Concepts*, 10<sup>th</sup> edition. Lippincott Williams & Wilkins.

### **Journal(s)**

Advances in Nursing Science

The Journal of Nursing Research

### **Website(s)**

<http://bsn/index.php/en/main-page-en>

[http://www.ipm.edu.mo/cntfiles/upload/docs/student\\_corner/en/student\\_handbook\\_e.pdf](http://www.ipm.edu.mo/cntfiles/upload/docs/student_corner/en/student_handbook_e.pdf)

<http://www.ssm.gov.mo/>

<http://www.who.int/en/>

<http://www.icn.ch/>

<http://www.ips.uk.net/>

<http://www.medterms.com/s>

## Timetable (Class A)

	Date & Time				Topic	Teacher
01	Jan	6	Thu	1430-1630	Administering Medications (1)	PANG
02		10	Mon	1430-1630	Administering Medications (2)	PANG
03		11	Tue	1100-1300	Evidence-Based Practice	JIN
04		12	Wed	1430-1630	Fluid, Electrolyte and Acid-Base Balances (1)	PANG
05		14	Fri	0900-1100	Critical Thinking	JIN
06		17	Mon	1430-1630	Fluid, Electrolyte and Acid-Base Balances (2)	PANG
07		18	Tue	0900-1100	Patient Education	JIN
08		18	Tue	1100-1300	Oxygenation	JIN
09		21	Fri	1430-1630	Fluid, Electrolyte and Acid-Base Balances (3)	PANG
10		25	Tue	0900-1100	Lab Class 1- Administering Medications (1)	PANG
11		25	Tue	1100-1300	Lab Class 2- Administering Medications (2)	PANG
12		26	Wed	1100-1300	Lab Class 3- Oxygenation	JIN
13	Feb	11	Fri	0900-1100	Loss and Grief	JIN
14		11	Fri	1100-1300	Bowel Elimination	JIN
15		14	Mon	1430-1630	Lab Class 4- Fluid, Electrolyte and Acid-Base Balances (1)	PANG
16		16	Wed	0900-1100	Lab Class 5- Fluid, Electrolyte and Acid-Base Balances (1)	PANG
17		16	Wed	1100-1300	Caring	MIO
18		17	Thu	0900-1100	Lab Class 6- Bowel Elimination	JIN
19		<b>22</b>	<b>Tue</b>	<b>0900-1100</b>	<b>Theoretical Test</b>	<b>MIO</b>
20		23	Wed	0900-1100	Cultural Competence	MIO
21		24	Thu	0900-1100	Lab Class 7- Skill Review (1)	CHAN
22		24	Thu	1100-1300	Lab Class 8- Skill Review (2)	CHAN
23		24	Thu	1430-1630	Growth and Development, Self-Concept and Sexuality, Family Nursing (1)	MIO
24	Mar	29	Tue	0900-1100	Growth and Development, Self-Concept and Sexuality, Family Nursing (2)	MIO
25		31	Thu	1100-1300	Urinary Elimination	JIN
26	Apr	1	Fri	1430-1630	Lab Class 9- Urinary Elimination	JIN
27		4	Mon	1430-1630	Spiritual Health	KWONG
28		19	Tue	1430-1630	Stress and Coping	KWONG
29		21	Thu	1430-1630	Lab Class 10- Skill Review (3)	CHAN
30	May	<b>3</b>	<b>Tue</b>	<b>0900-1100</b>	<b>Final Examination (pending)</b>	CHAN
	Apr	<b>28</b>	<b>Thu</b>	<b>0900-1700</b>	<b>Skill Examination</b>	TEAM



## Timetable (Class B)

	Date & Time				Topic	Teacher
01	Jan	6	Thu	0900-1100	Administering Medications (1)	PANG
02		7	Fri	1100-1300	Administering Medications (2)	PANG
03		10	Mon	0900-1100	Fluid, Electrolyte and Acid-Base Balances (1)	PANG
04		13	Thu	0900-1100	Caring	MIO
05		14	Fri	1430-1630	Fluid, Electrolyte and Acid-Base Balances (2)	PANG
06		17	Mon	0900-1100	Evidence-Based Practice	JIN
07		18	Tue	1430-1630	Fluid, Electrolyte and Acid-Base Balances (3)	PANG
08		19	Wed	0900-1100	Critical Thinking	JIN
09		20	Thu	1430-1630	Lab Class 1- Administering Medications (1)	PANG
10		24	Mon	0900-1100	Patient Education	JIN
11		25	Tue	1430-1630	Cultural Competence	MIO
12		26	Wed	0900-1100	Lab Class 2- Administering Medications (2)	PANG
13	<b>Feb</b>	<b>11</b>	<b>Fri</b>	<b>0900-1100</b>	<b>Theoretical Test</b>	<b>PANG</b>
14		15	Tue	0900-1100	Loss and Grief	JIN
15		16	Wed	1430-1630	Lab Class 3- Fluid, Electrolyte and Acid-Base Balances (1)	PANG
16		17	Thu	1100-1300	Growth and Development, Self-Concept and Sexuality (1)	MIO
17		17	Thu	1430-1630	Lab Class 4- Fluid, Electrolyte and Acid-Base Balances (2)	PANG
18		21	Mon	0900-1100	Oxygenation	JIN
19		22	Tue	1100-1300	Growth and Development, Self-Concept and Sexuality, Family Nursing (2)	MIO
20		25	Fri	0900-1100	Lab Class 5- Oxygenation	JIN
21		28	Mon	0900-1100	Spiritual Health	KWONG
22	Mar	1	Tue	1100-1300	Bowel Elimination	JIN
23		2	Wed	0900-1100	Stress and Coping	KWONG
24		7	Mon	0900-1100	Lab Class 6- Bowel Elimination	JIN
25		9	Wed	0900-1100	Urinary Elimination	JIN
26		14	Mon	0900-1100	Lab Class 7- Urinary Elimination	JIN
27		18	Fri	0900-1100	Lab Class 8- Skill Review (1)	CHAN
28		18	Fri	1100-1300	Lab Class 9- Skill Review (2)	CHAN
29		24	Thu	0900-1100	Lab Class 10- Skill Review (3)	CHAN
30	<b>May</b>	<b>3</b>	<b>Tue</b>	<b>0900-1100</b>	<b>Final Examination (pending)</b>	<b>MIO</b>
	<b>Apr</b>	<b>29</b>	<b>Fri</b>	<b>0900-1700</b>	<b>Skill Examination</b>	<b>TEAM</b>

## Timetable (Class C)

	Date & Time				Topic	Teacher
01	Jan	6	Thu	1100-1300	Evidence-Based Practice	JIN
02		7	Fri	0900-1100	Critical Thinking	JIN
03		7	Fri	1430-1630	Caring	MIO
04		10	Mon	1100-1300	Patient Education	JIN
05		11	Tue	0900-1100	Loss and Grief	JIN
06		12	Wed	0900-1100	Oxygenation	JIN
07		12	Wed	1100-1300	Bowel Elimination	JIN
08		14	Fri	0900-1100	Lab Class 1- Skill Review (1)	CHAN
09	Feb	10	Thu	1100-1300	Lab Class 2- Oxygenation	JIN
10		11	Fri	1430-1630	Lab Class 3- Bowel Elimination	JIN
11	Mar	2	Wed	0900-1100	Administering Medications (1)	PANG
12		2	Wed	1430-1630	Administering Medications (2)	PANG
13		7	Mon	1100-1300	Fluid, Electrolyte and Acid-Base Balances (1)	PANG
14		8	Tue	0900-1100	Fluid, Electrolyte and Acid-Base Balances (2)	PANG
15		14	Mon	1430-1630	Lab Class 4- Administering Medications (1)	PANG
16		<b>15</b>	<b>Tue</b>	<b>0900-1100</b>	<b>Theoretical Test</b>	<b>CHAN</b>
17		16	Wed	0900-1100	Lab Class 5- Administering Medications (2)	PANG
18		16	Wed	1430-1630	Fluid, Electrolyte and Acid-Base Balances (3)	PANG
19		18	Fri	1100-1300	Urinary Elimination	JIN
20		21	Mon	1100-1300	Lab Class 6- Fluid, Electrolyte and Acid-Base Balances (1)	PANG
21		22	Tue	0900-1100	Cultural Competence	MIO
22		23	Wed	1100-1300	Lab Class 7- Fluid, Electrolyte and Acid-Base Balances (2)	PANG
23		30	Wed	0900-1100	Growth and Development, Self-Concept and Sexuality, Family Nursing (1)	MIO
24		30	Wed	1430-1630	Growth and Development, Self-Concept and Sexuality, Family Nursing (2)	MIO
25	Apr	7	Thu	1430-1630	Lab Class 8- Urinary Elimination	JIN
26		11	Mon	0900-1100	Lab Class 9- Skill Review (2)	CHAN
27		12	Tue	0900-1100	Lab Class 10- Skill Review (3)	CHAN
28		13	Wed	1100-1300	Spiritual Health	KWONG
29		14	Thu	1100-1300	Stress and Coping	KWONG
30	May	<b>3</b>	<b>Tue</b>	<b>0900-1100</b>	<b>Final Examination (pending)</b>	PANG
	Apr	<b>27</b>	<b>Wed</b>	<b>0900-1700</b>	<b>Skill Examination</b>	TEAM

~End~