



FACULTY OF HEALTH SCIENCES AND SPORTS
BACHELOR OF SCIENCE IN BIOMEDICAL TECHNOLOGY (PHARMACY TECHNOLOGY)
LEARNING MODULE OUTLINE

Academic Year	2023-2024	Semester	1
Module Code	BSPP3101		
Learning Module	Pharmacy Practice II		
Pre-requisite(s)	Nil		
Medium of Instruction	Chinese / English		
Credits	4	Contact Hours	60
Instructor	Pedro Fong	Email	pedrofong@mpu.edu.mo
Office	Room M729, 7/F, Meng Tak Building	Office Phone	8599 3427

MODULE DESCRIPTION

This comprehensive 60-hour course aims to provide students with a solid foundation in diagnosing and effectively managing minor ailments using suitable over-the-counter (OTC) medications, while emphasizing the importance of patient counselling. Through a combination of theoretical learning and practical application, students will gain invaluable skills in evaluating symptoms, selecting appropriate OTC medicines, and delivering clear and concise guidance to ensure optimal patient care.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Demonstrate an understanding of the principles and guidelines related to the diagnosis and management of common minor ailments using over-the-counter (OTC) medicines.
M2.	Apply critical thinking skills to assess symptoms and differentiate between minor ailments that can be appropriately managed with OTC medications and those that require physician or other healthcare professional intervention.
M3.	Develop a knowledge base of commonly available OTC medications, including their indications, contraindications, dosages, and potential adverse effects.
M4.	Utilize counselling techniques to engage with patients, provide accurate information about OTC medicines, and address their concerns or queries.
M5.	Evaluate patients' specific health conditions, medical histories, and concurrent medications to ensure safe and appropriate recommendations of OTC treatments.
M6.	Evaluate scientific literature and evidence-based resources to stay updated with new OTC products, and changes in guidelines for managing minor ailments.



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

PILOs	M1	M2	M3	M4	M5	M6
P1. To demonstrate understanding of a range of subjects, fields, principles and approaches relevant to pharmacy technology	✓	✓	✓	✓	✓	✓
P2. To demonstrate understanding of theories, analytical approaches and practices that underpin pharmacy operations and management	✓	✓	✓	✓	✓	✓
P3. To demonstrate understanding of major trends and issues related to pharmacy technology						✓
P4. To apply professional knowledge and skills to analyse, interpret and solve problems, challenges and risks in pharmacy practice	✓	✓	✓	✓	✓	✓
P5. To critically appraise and interpret scientific and clinical literature and apply evidence-based practice	✓	✓				✓
P6. To acquire and apply research skills in pharmacy technology						✓
P7. To demonstrate effective communication and teamwork skills				✓	✓	
P8. To maintain professional and ethical standards in pharmacy practice and research						✓

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage	Contact Hours
3	Introduction to mnemonics and consultation <ul style="list-style-type: none"> • WHAM questions • ASMETHOD questions • Decision-making: risk assessment • Privacy in the pharmacy 	2
4/5/6	Gastrointestinal Tract Problems <ul style="list-style-type: none"> • Mouth ulcers • Heartburn • Indigestion • Nausea and vomiting • Motion sickness and its prevention • Constipation • Diarrhoea • Irritable bowel syndrome 	12
7/8/10	Skin Conditions <ul style="list-style-type: none"> • Eczema / dermatitis • Acne • Athlete's foot • Cold sores • Warts and verrucae • Scabies • Dandruff 	10



	<ul style="list-style-type: none">• Hair loss• Psoriasis	
11	Painful Conditions <ul style="list-style-type: none">• Headache• Musculoskeletal problems	4
12	Respiratory Problems <ul style="list-style-type: none">• Colds and flu• Cough• Sore throat• Allergic rhinitis• Respiratory symptoms for direct referral	6
13	Eye and Ear Problems <ul style="list-style-type: none">• Eye problems: the painful red eye• Common ear problems	4
To be announced	Midterm Test	2
13/14	Women's Health <ul style="list-style-type: none">• Cystitis• Dysmenorrhoea• Vaginal thrush• Emergency hormonal contraception• Common symptoms in pregnancy	8
14	Childhood Conditions <ul style="list-style-type: none">• Common childhood rashes• Colic• Teething• Napkin rash• Head lice• Threadworms (Pinworms)• Oral thrush	6
14/15	Insomnia	1
15	Prevention of Heart Disease	1
15	Digital Pharmacy <ul style="list-style-type: none">• Introduction to digital health• Wearable technology• Smart home and telepharmacy• Digital pharmacy services	2
16	Final Examination	2



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	M5	M6
T1. Lectures	✓	✓	✓		✓	
T2. Role-plays	✓	✓	✓	✓	✓	
T3. Patient case studies	✓	✓	✓		✓	
T4. Literature review and critical analysis	✓					✓
T5. Group discussion	✓	✓	✓	✓	✓	✓
T6. Multimedia resources (videos, podcasts, or online resources)	✓			✓	✓	✓

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

In this learning module, students are required to complete the following assessment activities:

Assessment Activities	Weighting (%)	ILOs to be Assessed
A1. In-class exercise	5	M1, M2, M3, M4, M5, M6
A2. Assignment	15	M1, M3, M5, M6
A3. Midterm test	20	M1, M2, M3, M4, M5
A4. Presentation	10	M1, M3, M5, M6
A5. Final examination	50	M1, M2, M3, M4, M5

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

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

High grades will be awarded to work that demonstrates exceptional understanding and mastery of the subject matter and consistently exceeding expectations. The followings are the general assessment criteria for the assessment activities.

Assessment Activities	Assessment Criteria	Mark Ranges				
		88-100	73-87	58-72	50-57	<50
A1. In-class exercise	Demonstrate the ability to apply theoretical knowledge to practical scenarios and demonstrate effective problem-solving skills.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels
A2. Assignment	Demonstrate the depth of understanding and critical analysis of minor ailments, OTC medications, and patient counselling through a well-structured and evidence-based written assignment.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels
A3. Midterm test	Assess the comprehension and retention of key concepts related to the diagnosis, management, and counselling of common minor ailments using OTC medicines through a timed OSCE examination.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels
A4. Presentation	Assess the communication skills, ability to convey complex information clearly and concisely, and the use of appropriate visual aids to effectively deliver a well-structured presentation on a specific minor ailment and its recommended OTC treatment.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels
A5. Final examination	Demonstrate an understanding and application of knowledge across all module topics, including diagnosis, management, counselling, and ethical considerations, through a comprehensive OSCE examination	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels



REQUIRED READINGS

Alison Blenkinsopp, Paul Paxton and John Blenkinsopp (2018) *Symptoms in the Pharmacy: A Guide to the Management of Common Illness*, John Wiley & Sons.

Alan Nathan (2020) *Non-prescription Medicines*, Pharmaceutical Press.

Reading materials, such as lecture notes and journal articles, will be provided to the students by the instructors of this module.

REFERENCES

Brian Addison, Alyson Brown, Ruth Edwards and Gwen Gray (2012) *Minor Illness or Major Disease*, Pharmaceutical Press.

Alan Nathan (2012) *Managing Symptoms in the Pharmacy*, 2nd edition, Pharmaceutical Press.

Elaine Mackowiak (2012) *Essentials of Nonprescription Medications and Devices*, Pharmaceutical Press.

Paul Rutter (2009) *Community Pharmacy: Symptoms, Diagnosis and Treatment*, Churchill Livingstones.

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/.