澳門理工大學
Universidade Politécnica de Macau
Macao Polytechnic University

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	BSTP4101		
Learning Module	Thesis I (專題習作 I)		
Pre-requisite(s)	Nil		
Medium of Instruction	Chinese / English		
Credits	2	Contact Hours	30
Instructor	Tong Hoi Yee, Henry Lao Cheng Kin, Chatmann Kuok Chiu Fai, Kenny Yi Tao, Aaron Pedro Fong	Email	pedrofong@mpu.edu.mo (module coordinator)
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MODULE DESCRIPTION

This module focuses on developing students' in-depth understanding of a specific topic in pharmacy practice or pharmaceutical science. It begins by identifying the core issues within the chosen topic and subsequently investigating the related factors. Students will engage in critical analysis of appropriate research reports and medical literature to gain a comprehensive understanding of the core issues. Students will be required to submit a research proposal at the end of the module, demonstrating their ability to apply their knowledge and propose research directions in the field.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Apply critical thinking skills to explore and analyse pharmacy practice or pharmaceutical science research.
M2.	Cultivate awareness and responsiveness to current issues in pharmacy practice or pharmaceutical science.
M3.	Acquire proficiency in utilizing available evidence to evaluate and assess current pharmacy practices or advancements in pharmaceutical science.
M4.	Develop an understanding of ethical considerations in research and adhering to research ethics guidelines.
M5.	Develop the ability to formulate action plans for improving pharmacy practice or developing pharmaceutical science.
M6.	Develop proficiency in writing research proposals at an academic level suitable for submission in grant applications.

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
0-2	Topic and Core Issue Identification: • Collaboratively in a group of students to identify a topic of interest and its core issues within the field of pharmacy practice or pharmaceutical science.	2
2-4	Practice Observation: • Observe the assigned topic in practice, focusing on a specific aspect such as assessment, planning, implementation, and evaluation. Analyse the current practice in relation to these stages.	2
2-4	Stakeholder Analysis: • Identify the stakeholders involve in the chosen field of pharmacy practice or pharmaceutical science. These may include pharmacists, pharmacy technicians, other healthcare professionals, service-users, management, the community, and government.	2
4-9	In-depth Exploration: • Develop research questions from the identified issues for further in-depth exploration.	2
1-15	Discussion: • Engage in discussions to explore related issues surrounding the chosen topic and identify its core aspects.	6
1-9	Literature Review: • Conduct a comprehensive search for relevant literature, including research reports from professional journals, mass media, and government documents, to gain insights and support the exploration of the chosen topic.	6

9-15	Formulation of an initial project plan / proposal • Develop an initial version of either a research proposal or an action plan for improving pharmacy practice. • Provide a comprehensive explanation of the initial proposal, outlining its key components, objectives, and intended outcomes.	10

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. Case Studies	✓	✓	✓	✓	✓	
T2. Literature Reviews Tutorials	✓	✓	✓			
T3. Group Discussions	✓		✓		✓	
T4. Peer Feedback and Review	✓	✓	✓	✓	✓	
T5. Research Proposal Workshops						✓
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. Research Proposal	60	M1, M2, M3, M4, M5, M6
A2. Proposal Presentation	40	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.

This module does not include a final examination or re-sit examination.

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. Research Proposal	• Clarity, focus, and significance of research question/objective. • Well-structured design, methodology, and rigor. • Comprehensive literature review, gap identification, and originality. • Addressing ethical considerations.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels
A2. Proposal Presentation	• Content clarity, organization, and effective communication. • Response to questions/feedback and deep understanding of the topic. • Adherence to time limit and effective time management in prioritizing information.	Excellent	Good/ Very Good	Satisfactory	Marginal Pass	Fail; not reaching marginal levels

REQUIRED READINGS

All the teaching and learning materials from the module 'Research Methods (BSRM3102).'

Reading materials will be provided to the students by the instructors of this module.

Students should also actively identify the reading materials based on their chosen research topics under the guidance of their instructor.

REFERENCES

Students should also identify the references based on their chosen research topics under the guidance of their instructor. These references may include research reports, published undergraduate/postgraduate dissertations, research articles, short communications, professional magazines, and more.

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/.