FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE IN COMPUTING

LEARNING MODULE OUTLINE

Academic Year	2025/2026	Semester	1
Module Code	EDUC3111		
Learning Module	Introduction to Education		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	3	Contact Hours	45 hrs
Instructor	Dr. Junjie Wu	Email	gavinwu@mpu.edu.mo
Office	PEARL JUBILEE, TAIPA-P331	Office Phone	8399 8692

MODULE DESCRIPTION

This module is an introductory and compulsory module for students who are considering teaching as a profession and who are seeking a better understanding about the complexity and importance of education. This module will provide students with theories in the field of education, focus primarily on the nature and importance of the teaching profession, and discuss the current challenges and requirements for the profession. This module will lay a foundation for learning other professional educational modules.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Define the essential characteristics of effective schools and effective communication; (C16, C17, C18)
M2.	Use key principles of learning, classroom management, assessment, and professionalism in teaching; (C16, C17, C18)
M3.	Apply problem-solving skills in teaching; (C16, C17, C18)
M4.	Examine the critical issues for the contemporary teachers and the required knowledge base, as well as the challenges. (C16, C17, C18)

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

PILOs	M1	M2	M3	M4
P1. Select and apply proven methods, tools and techniques to the effective and efficient implementation of information systems on common platforms, including the Internet platform;				
P2. Acquire essential knowledge in specific fields of computing disciplines				

	including networking, artificial intelligence and security;				
P3.	Apply necessary mathematical techniques to model, analyse and devise solutions to complex problems;				
P4.	Work independently to develop an understanding of, and the knowledge and skills associated with the general support and mitigation of security risks of computer systems and networks;				
P5.	Design and implement relational database, with an emphasis on how to organise, maintain, retrieve and analyse information;				
P6.	Distinguish the fundamental and operational issues of computer systems, with considerations of user, business, ethical, societal and environmental needs;				
P7.	Evaluate, prepare and communicate effectively on technical information to both technical and non-technical audience;				
P8.	Work as an effective member of a team in the analysis, design and development of software systems, with recognition of requirement to support equality, diversity and inclusion;				
P9.	Use project planning, risk management and quality management techniques in solutions to complex problems;				
P10.	Build the capacity and desire for lifelong learning and to learn advanced and emerging technologies on one's own;	✓	✓	✓	✓
P11.	(For Business Intelligence specialization) Gain an in-depth knowledge of technologies related to data analysis and management of information to support business processes in enterprises;				
P12.	(For Gaming Technology specialization) Acquire the general and advanced knowledge of current technologies and operating environment for the development of the gaming and tourism industry;				
P13.	(For Computer Education specialization) Acquire general and practical knowledge of computer education and its practicing environment in secondary education;	✓	✓	✓	✓

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage	Contact Hours
1-2	1 Introduction	6
	1.1 What is education?	
	1.2 Why do I want to be a teacher?	
3-4	2 Learning to teach	6
	2.1 What makes a teacher effective?	
	2.2 Reflective teaching for student learning	

5-8	3 Understand key principles of learning	6
9-12	4 How teachers organise and teach	15
	4.1 Planning and preparing for teaching	
	4.2 How to teach	
	4.3 Propose and practice communication in the classroom	
	4.4 Design and practice classroom management	
	4.5 Design and review assessment practice	
13-14	5 The teaching profession	6
	5.1 Understand challenges in the first year teaching practice	
	5.2 Define and design professional development in teaching	
15	6 Education in Macao	6
	6.1 Understand general aspects of Macao secondary education	
	6.2 Create teaching materials in computer education in Macao secondary schools	

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. In-class exercises	✓	✓	✓	✓

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	AHEP4 LOs	ILOs to be

	(%)		Assessed
A1. Presentation	20	C16, C17	M1, M2, M3, M4
A2. Reflection	20	C16, C17	M1, M2, M3, M4
A3. Examination	60	C16, C17, C18	M1, M2, M3, M4

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.

Students with an overall score of less than 35 in the coursework must take the re-sit examination even if the overall score for the module is 50 or above.

Students with a score of less than 35 in the final examination must take the re-sit examination even if the overall score for the module is 50 or above.

Students with an overall final grade of less than 35 are NOT allowed to take the re-sit examination.

REQUIRED READINGS

Ryan, K., Cooper, J. & Tauer, S. (2018). *Teaching for Student Learning: Becoming a Master Teacher* (3rd edition). Cengage.

REFERENCES

1. Ryan, K. & Cooper, J. (2016). *Those Who Can, Teach*. (14 edition). Cengage
2. Marsh, C. (2007). *Becoming a teacher: Knowledge, skills and issues* (Fourth edition). Pearson Education.
3. Arends, R. I. (2012). *Learning to teach* (Tenth edition). McGraw Hill Education.

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/.