

FACULTY OF HEALTH SCIENCES AND SPORTS BACHELOR OF SCIENCE IN SPEECH-LANGUAGE THERAPY LEARNING MODULE OUTLINE

Academic Year	2023/2024	Semester	1	
Module Code	COMP1130			
Learning Module	Information Technology Fundamentals			
Pre-requisite(s)	Nil			
Medium of Instruction	English and Chinese			
Credits	2	Contact Hours	30	
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MODULE DESCRIPTION

This is an introductory course on computers and their role in the modern world, preparing students for the challenges of tomorrow's workplace by equipping them with knowledge to engage in fast-moving information technology. It is designed to develop an in-depth understanding of why computers are essential components in the business world and society.

Topics include basic concepts of software and hardware, theory behind the computer operations, and some simple applications.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Impart a level of computer literacy appropriate for general computer use.		
M2.	Explain basic local networking and Internet functions in depth.		
M3.	Explain the applications of software and hardware in depth.		
M4.	Explain the significance of the role of the computer in society including security, ethical and legal issues.		



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

PILC	Os .	M1	M2	М3	M4
P1.	To demonstrate understanding of knowledge in behavioural sciences, speech and hearing sciences, as well as speech and hearing disorders				
P2.	To demonstrate understanding of knowledge in assessment, treatment, counselling and other professional knowledge related to speech, language and swallowing impairment				
P3.	To employ professional techniques in assessment and intervention in language, speech and swallowing disorders	✓			
P4.	To demonstrate effective communication and teamwork skills		✓	✓	
P5.	To demonstrate a high standard of professional ethics and attitudes of holistic care, respect and compassion				√
P6.	To recognise the international trend of speech and hearing disorders and develop the spirits of social involvement and lifelong learning				

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage	Contact Hours
	Introducing Today's Technologies: Computers, Devices, and The Web	
1	1.1. Today's Technology	2
	1.2. Computers, Mobile and Game Devices	
	1.3. Data and Information	
	2. Connecting and Communicating Online: The Internet, Websites, and	
2	Media	2
2	2.1. The Internet 2.2. The World Wide Web	2
	2.3. Other Internet Services 2.3. Other Internet Services 2.4. Computers and Mabile Devices: Evaluating Options for Home and Work	
	3. Computers and Mobile Devices: Evaluating Options for Home and Work 3.1. Mobile Computers and Desktops	
3	3.1. Mobile Computers and Desktops3.2. Cloud Computing	2
3	3.3. Protecting Hardware	2
	3.4. Health Concerns of Using Technology	
	Programs and Apps: Productivity, Graphics, Security, and Other Tools	
	4.1. Productivity Applications	
	4.2. Graphics and Media Applications	
4	4.3. Personal Interest Applications	2
	4.4. Communications Applications	
	4.5. Utility Programs	
	5. Digital Security, Ethics, and Privacy: Threats, Issues, and Defenses	
	5.1. Digital Security Risks	
5	5.2. Internet and Network Attacks	2
	5.3. Unauthorized Access and Use	
	5.4. Software Theft, Information Theft, and Hardware Theft	
6	5.5. Ethics and Society	2
	5.6. Information Privacy	
7	6. Computing Components: Processors, Memory, the Cloud, and More	2
7	6.1. Inside the Case	2

	1	
6.2. Processors, Cloud Computing, Memory, Adapters, Buses, and		
Power Supply		
6.3. Data Representation		
Test	2	
7. Input and Output: Extending Capabilities of Computers and Mobile Devices		
7.1. Input Devices	2	
7.2. Output Devices		
7.3. Assistive Technology Input and Output		
8. Digital Storage: Preserving Content Locally and on the Cloud		
8.1. Hard Drives		
8.2. Portable Flash Memory Storage	2	
8.3. Cloud Storage and Enterprise Storage		
8.4. Other Types of Storage		
9. Operating Systems: Managing, Coordinating, and Monitoring Resources		
9.1. Operating Systems Functions	2	
9.2. Desktop Operating Systems, UNIX, Server Operating Systems	2	
9.3. Mobile Operating Systems		
10. Communicating Digital Content: Wired and Wireless Networks and		
Devices		
10.1. Communications	2	
10.2. Types of Networks		
10.3. Communications Software		
10.4. Network Communications Standards and Protocols	2	
10.5. Communications Devices and Transmission Media	2	
Revision	2	
Final Examination	2	
	Power Supply 6.3. Data Representation Test 7. Input and Output: Extending Capabilities of Computers and Mobile Devices 7.1. Input Devices 7.2. Output Devices 7.3. Assistive Technology Input and Output 8. Digital Storage: Preserving Content Locally and on the Cloud 8.1. Hard Drives 8.2. Portable Flash Memory Storage 8.3. Cloud Storage and Enterprise Storage 8.4. Other Types of Storage 9. Operating Systems: Managing, Coordinating, and Monitoring Resources 9.1. Operating Systems Functions 9.2. Desktop Operating Systems, UNIX, Server Operating Systems 9.3. Mobile Operating Systems 10. Communicating Digital Content: Wired and Wireless Networks and Devices 10.1. Communications 10.2. Types of Networks 10.3. Communications Software 10.4. Network Communications Standards and Protocols 10.5. Communications Devices and Transmission Media	

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		M2	M3	M4
T1. Lectures	✓	✓	✓	✓
T2. Lab practices	✓	✓	✓	✓

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. Assignment	20%	M1, M2, M3, M4	
A2. Test	30%	M1, M2, M3, M4	
A3. Examination	50%	M1, M2, M3, M4	

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

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.

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

REQUIRED READINGS

1. Vermaat, Sebok, Freund, Campbell, and Frydenberg (2018). *Discovering Computers 2018* (1st ed.). Cengage Technology.

REFERENCES

- D. Morley, C. S. Parker. (2017). Understanding Computers: Today and Tomorrow, Comprehensive (16th ed.). Cengage Technology.
- 2. B. K. Williams, S. C. Sawyer. (2010). *Using Information Technology: a practical introduction to computers* & communications (8th ed.). McGraw-Hill.

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/.