



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

Academic Year	2024/2025	Semester	2
Module Code	COMP1102		
Learning Module	Advanced Computer Applications		
Pre-requisite(s)	Nil		
Medium of Instruction	Chinese and English		
Credits	2	Contact Hours	30
Instructor	Dr. Liam Lei	Email	liamli@mpu.edu.mo
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**MODULE DESCRIPTION**

This course prepares students for the challenges of tomorrow's workplace by equipping them with practical knowledge and skills to engage in fast-moving information technology. Extensive hands-on exercises are provided using business applications and operating systems to reinforce the concepts. Software may include the advanced topics on spreadsheets, word processing, presentation and the web browser.

**MODULE INTENDED LEARNING OUTCOMES (ILOS)**

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

M1.	Explain the purpose of the programs in an office suite and web office applications.
M2.	Use software to solve simple problems.
M3.	Use advanced topics of word processor, spreadsheet and presentation software.

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

PILOs	M1	M2	M3
P1. To demonstrate understanding of a range of subjects, fields, principles and approaches relevant to medical laboratory technology			
P2. To demonstrate understanding of theories, analytical approaches and practices that underpin medical laboratory operations and management			
P3. To demonstrate understanding of major trends and issues related to medical laboratory technology			
P4. To apply professional knowledge and skills to analyse, interpret and solve problems, challenges and risks in medical laboratory practice			
P5. To critically appraise and interpret scientific and clinical literature and apply evidence-based practice			



P6. To acquire and apply research skills in medical laboratory technology	✓	✓	✓
P7. To demonstrate effective communication and teamwork skills			
P8. To maintain professional and ethical standards in medical laboratory practice and research			

#### MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage	Contact Hours
1-3	Creating a Professional Document with Word <ul style="list-style-type: none"> <li>● Inserting and Formatting Picture/Table</li> <li>● Using Columns and Section Breaks</li> <li>● Applying Advanced Paragraph Formatting</li> </ul>	6
4-6	Creating a Research Paper/Dissertation with Word <ul style="list-style-type: none"> <li>● Paragraph Setting and Styles</li> <li>● Creating Footnote</li> <li>● Creating Table of Content &amp; Table of Figures</li> <li>● Proofing &amp; Revising Research Paper</li> <li>● Preparing Citation and Reference List</li> </ul>	6
7-9	Advanced editing <ul style="list-style-type: none"> <li>● Creating a Letter Head and Cover Letter</li> <li>● Creating a Resume Using a Template</li> <li>● Using Mail Merge to Create Forms, Letters and Mailing Labels</li> </ul>	6
10	Working with Worksheet <ul style="list-style-type: none"> <li>● Worksheet Formatting</li> <li>● Formulas and Functions</li> </ul>	2
11-12	Analyzing Data with Spreadsheet <ul style="list-style-type: none"> <li>● AutoFilter and Advanced Filter</li> <li>● What-if Analysis</li> <li>● Charting</li> <li>● Working with Large Worksheets</li> <li>● Linking an Excel Worksheet and Chart to a Word document</li> </ul>	4
13	Working with MS PowerPoint Presentation <ul style="list-style-type: none"> <li>● Formatting and Organizing Slides</li> <li>● Slide Design and Layout</li> <li>● Using Slide Master</li> </ul>	2
14	Preparing For Presentation <ul style="list-style-type: none"> <li>Rehearse Timing</li> <li>Slide Transition</li> <li>Graphics and Animation</li> </ul>	2
15	Final exam	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
T1. Lectures	✓	✓	✓
T2. Lab Practice	✓	✓	✓

## 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. Assignments/In-class practice	30%	M1-M3
A2. Test	20%	M1-M3
A3. Final Examination	50%	M1-M3

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](http://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

**Excellent:** Strong evidence of original thinking; good organisation, capacity to analyse and systemise; superior grasps of subject matter; strong evidence of extensive knowledge base.

**Very Good:** Evidence of grasps of subject; strong evidence of critical capacity and analytical ability; good understanding of issues; evidence of familiarity with literature.

**Good:** Evidence of grasp of subject; some evidence of critical capacity and analytical ability; reasonable understanding of issues; evidence of familiarity with literature.



**Satisfactory:** Profiting from the study experience; understanding of the subject; ability to develop solutions to simple problems in the material.

**Pass:** Sufficient familiarity with the subject matter to enable the student to progress without repeating the learning module.

**Fail:** Little evidence of familiarity with the subject matter; weak in critical and analytical skills; limited, or irrelevant use of literature.

## REQUIRED READINGS

### Textbook(s)

M. E. Vermaat (2019). *Microsoft Office 365 & Office 2019 Introductory (1<sup>st</sup> Edition)*. Cengage Learning.

## REFERENCES

### Reference book(s)

Ian Ewell, C. (2019). *Welcome to Microsoft Office 2019& 365*. Labrinth Learning

Lambert& Frye. (2019). *Microsoft Office 2019 Step by Step*. Microsoft Press.

Weverka, P. (2018). *Office 2019 All-in-One For Dummies*(1<sup>st</sup>edition). For Dummies

## 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/](http://www.mpu.edu.mo/student_handbook/).