

# Macao Polytechnic Institute

## School of Business

### Bachelor of Accounting

#### Module Outline

Academic Year 2020 / 2021

Semester 1

<b>Learning Module</b>	Computerized Accounting for Small Businesses	<b>Class Code</b>	ACCT4130-411		
<b>Pre-requisite(s)</b>	Nil				
<b>Medium of Instruction</b>	English	<b>Credit</b>	3		
<b>Lecture Hours</b>	22.5 hrs	<b>Lab/Practice Hours</b>	22.5 hrs	<b>Total Hours</b>	45 hrs
<b>Instructor</b>	Vincent Leung	<b>E-mail</b>	wsleung@ipm.edu.mo		
<b>Office</b>	Room M523, Meng Tak Building, Main Campus	<b>Telephone</b>	8599-3323		

#### Description

This course explores accounting as it is placed in a computerized accounting environment in a small business environment. This course is intended for students to gain knowledge and practices on computerized accounting to do basic areas of accounting such as payables, payrolls, depreciation, inventory, preparation of financial statements and reports.

Hand-on computer laboratory sessions are an essential integral part of this course. Students will work independently or in groups on a series of assignments so as to develop working knowledge of utilizing common application software effectively for solving business or accounting problems.

## **Learning Outcomes (LOs)**

After completing the learning module, students will be able to:

No.	LOs
1.	Illustrate and explain the fundamental concepts of information systems auditing, computer security threats and remedies.
2.	Develop a critical mind for evaluating and auditing information systems.
3.	Critically examine the systems development life cycle and AIS development strategies.
4.	Demonstrate proficiency in the use of Microsoft Office for analyzing and communicating information.
5.	Work in a team environment, demonstrating team building and presentation skills.

## **Alignment of Program and Course Intended Outcomes**

Please refer to Appendix I

<b>Content</b>	<b>Duration</b>
<p>1. Information Systems Controls for System Reliability – Part 1:Information Security (Chapter 8)</p> <ul style="list-style-type: none"> <li>▶ Understanding Targeted Attacks</li> <li>▶ Preventive Controls</li> <li>▶ Detective Controls</li> <li>▶ Security Implication of Virtualization and the Cloud</li> </ul>	1.5 hours
<p>2. Information Systems Controls for System Reliability – Part 2: Confidentiality and Privacy (Chapter 9)</p> <ul style="list-style-type: none"> <li>▶ Preserving Confidentiality</li> <li>▶ Privacy</li> <li>▶ Encryption</li> </ul>	1.5 hours
<p>3. Information Systems Controls for System Reliability – Part 3: Processing Integrity and Availability (Chapter 10)</p> <ul style="list-style-type: none"> <li>▶ Processing Integrity</li> <li>▶ Availability</li> <li>▶ Change Control</li> </ul>	1.5 hours
<p>4. Auditing Computer-Based Information Systems (Chapter 11)</p> <ul style="list-style-type: none"> <li>▶ The Nature of Auditing</li> <li>▶ Information Systems Audits</li> <li>▶ Audit Software</li> <li>▶ Operational Audit of an AIS</li> </ul>	1.5 hours
<p>5. Introduction to Systems Development; Systems Analysis (Chapter 20)</p> <ul style="list-style-type: none"> <li>▶ System Development</li> <li>▶ Planning systems Development</li> <li>▶ Feasibility Analysis</li> <li>▶ Behavioural Aspects of Change</li> <li>▶ System Analysis</li> </ul>	1.5 hours

Content	Duration
<p>6. AIS Development Strategies (Chapter 21)</p> <ul style="list-style-type: none"> <li>▶ Purchasing Software</li> <li>▶ Development by in-House Information Systems Departments</li> <li>▶ Outsourcing the System</li> <li>▶ Business Process Management</li> <li>▶ Prototyping</li> <li>▶ Computer-Aided Software Engineering</li> </ul>	2 hours
<p>7. Systems Design, Implementation, and Operation (Chapter 22)</p> <ul style="list-style-type: none"> <li>▶ Conceptual Systems Design</li> <li>▶ Evaluate Design Alternatives</li> <li>▶ Physical Systems Design</li> <li>▶ Systems Implementation</li> <li>▶ Systems Conversion</li> <li>▶ Operation and Maintenance</li> </ul>	2 hours
<p>8. Introduction to Excel</p> <ul style="list-style-type: none"> <li>▶ Spread sheet structure</li> <li>▶ Tool bars and buttons</li> <li>▶ Formula settings</li> <li>▶ Copy formulas and values</li> <li>▶ Basic spread sheet design</li> </ul>	5 hours
<p>9. Advanced Excel Operations</p> <ul style="list-style-type: none"> <li>▶ Sorting and data management</li> <li>▶ Excel functions</li> </ul>	2.5 hours

<b>Content</b>	<b>Duration</b>
10. Accounting Schedules Design <ul style="list-style-type: none"> <li>▶ Interest calculation</li> <li>▶ Depreciation</li> <li>▶ Amortization of receivable / payable with discount / premium</li> <li>▶ Daily sales schedule</li> <li>▶ Other schedules for journal preparation</li> <li>▶ Sub-ledger design</li> <li>▶ Cash budget schedule</li> </ul>	11 hours
11. Introduction to Macro and Visual Basic <ul style="list-style-type: none"> <li>▶ Macro introduction</li> <li>▶ Macro recording</li> <li>▶ Understand Macro language</li> <li>▶ Spread sheet design to improve Macro</li> <li>▶ Use Visual Basic to improve Macro</li> </ul>	10 hours
12. Mid-term test	2 hours
13. Final examination	3 hours
<b>Total</b>	<b>45 hours</b>

### **Class Practice**

Date & Time	Practice Item	Practice Title	Students / Group	Mode of Practice	Practice Requirement
2020/09/07 to 2020/12/15 16:00 to 17:30	Microsoft Excel, Macro and Visual Basic	N/A	Students	Computer-based learning	N/A

## **Teaching Method (TMs)**

This course adopts a progressive interactive learning approach to involve students in actively learning the necessary knowledge, skills and techniques to solve assignments problems and exercises that simulate simplified business scenarios. In addition to reading materials in the text, students will be asked to perform in-class exercises which will deepen their proficiency in the fundamentals by challenging students to actively explore the course materials. Quiz and Mid-term tests will be used to monitor students' progress and commitment of knowledge acquisition throughout the course. A comprehensive final examination is used to assess students' overall performance at the end of the course.

- TM1: This course is delivered primarily through spoken lectures with the aid of power point slides. These lectures will explores accounting as it is placed in a computerized accounting environment in a small business environment.
- TM2: In-class exercises will be given at the end of selected chapters. Quiz will also be given to help students remember what they learned, and assess what they learned. Discussions are part of the class activities during which teamwork will be encouraged. Current events with financial, accounting, and economic implications will be raised during class to help students think and understand the linkage of the course learning with current news events, the importance of the need of ongoing learning.
- TM3 A group project will be used to enable students to develop effective working relationships, thus promoting student engagement where they will learn better when they actively engage with their peers, thereby gaining a deeper understanding of the subject matter through sharing and challenging experiences and ideas, applying their learning and defending and reflecting on their own understanding.

### Alignment of LOs with TMs:

TMs	Brief Description	LOs No.				
		1	2	3	4	5
TM1: Interactive lectures	Lectures: in-depth coverage of the knowledge and practices on computerized accounting using power point slides and other illustration materials as necessary.  Q&A: time allowed to raise questions from both instructor and students	√	√	√	√	
TM2: In-class exercises and quiz	Students must preview the teaching material before each class, as they will be asked to work on problems or respond to conceptual issues inherent in the text books. This objective will be achieved through the following learning activities:  1) In-class exercises will be discussed at the end of each chapter to ensure student understanding of the accounting issues.  2) Quiz will be given to students in order to motivate them to review what they have learned.	√	√	√	√	
TM3: Group Project and Presentation	Students will be required to work together to complete a piece of assessed work (i.e. Group Project). This group project will be designed to promote students intellectual, social and presentation skills and help to prepare them for a work world in which teamwork and collaboration are increasingly the norm.	√	√	√	√	√

In order to achieve the outcomes of this course, students are expected to perform the following learning tasks:

- 1) Reading and prepare assigned material before class, which is important to improve understanding of the lectures
- 2) Review and work on exercises after class to enhance understanding
- 3) Attend school arranged seminars and meetings to expand the knowledge horizon
- 4) Prepare and collect information to prepare report
- 5) Prepare for test and final exam
- 6) Seek advice from instructor for difficulties encountered
- 7) Form study group to learn from each other and practice communication skills

## **Attendance**

Attendance requirements are governed by the “Academic Regulations Governing Bachelor’s Degree Programmes of Macao Polytechnic Institute”.

## **Assessment**

The following activities and tasks (i.e. coursework components and examinations) are designed to provide students with a broad range of learning experiences. Assessment will be both formative and summative and will involve in-class exercises, quiz, group project, mid-term test and final exam. The following is a summary of the assessment tasks:

	<b>Item/Description</b>	<b>Percentage</b>	<b>Outcomes to be assessed by the tools</b>
1.	In-class exercises (non-graded)	N/A	LOs 1-4
2.	Quiz (graded)	5%	LOs 1-3
3.	Group project (graded)	15%	LOs 5
4.	Mid-term Examination (graded)	30%	LOs 1-4
5.	Final Examination (graded) *	50%	LOs 1-4
	Total Percentage:	<u>100%</u>	

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

## **Teaching Material(s)**

Marshall B. Romney & Paul Steinbart. (2017). Accounting Information Systems, 14th Edition, Pearson Education, Asia.

## **Plagiarism Policy**

When a student submits an assignment, he has a duty to ensure that his assignment has been checked by Turnitin software, and the similarity score given by Turnitin software cannot be higher than 30%. However, a special case can be determined by the instructor.



## **Reference Books and Articles**

1. Vernon Richardson, Chengyee Chang & Rod Smith. (2017). Accounting Information Systems, 2<sup>nd</sup> Edition, McGraw-Hill Education.
2. June Jamrich Parsons, David W. Beskeen, Carol M. Cram, Jennifer Duffy, Lisa Friedrichsen. (2016). Illustrated Computer Concepts and Microsoft Office 365 & Office 2016, Cengage Learning.
3. R. Cascarino. (2012). Auditor's Guide to IT Auditing (Wiley Corporate F&A Book 583), Kindle Edition, Wiley.
4. Curtis D. Frye. (2019). Microsoft Excel 2019 Step by Step, 1<sup>st</sup> Edition, Microsoft Press.
5. John Walkenbach. (2010). Excel 2010 Bible, Wiley Publishing Inc.
6. Greg Harvey. (2019). Excel 2019 All-in-One For Dummies, Wiley Publishing Inc.
7. Paul McFedries. (2019). Microsoft Excel 2019 Formulas and Functions (Business Skills), 1<sup>st</sup> Edition, Microsoft Press.
8. Microsoft Excel Course for any version 2007 or later.  
<http://www.homeandlearn.co.uk/excel2007/Excel2007.html>
9. Examples of commonly used formulas  
<http://office.microsoft.com/en-001/excel-help/examples-of-commonly-used-formulas-HP005200127.aspx>
- 10 Free Excel 2016 Tutorial at GCFLearnFree.org  
<https://edu.gcfglobal.org/en/excel2016/>