

# Faculty of Business Bachelor of Accounting

#### **LEARNING MODULE OUTLINE**

Academic Year	2023/2024	Semester	I
Module Code	ACCT3130-311		
Learning Module	Cost Accounting		
Pre-requisite(s)	n/a		
Medium of Instruction	English		
Credits	3	Contact Hours	45
Instructor	CHOU CHI KEONG	Email	<u>t1787@mpu.edu.mo</u>
Office	Room B110, Chi Un Building	Office Phone	85993304

#### **MODULE DESCRIPTION**

This module introduces students to costing principles and techniques, and elements of management accounting which are used to make and support decision-making. Topics covered in this module include the nature and purpose of cost and management accounting, cost classification, behaviour and purpose, business uncertainties, cost accounting techniques under job and process costing, budgeting and standard costing, and short term decision-making techniques.

## **MODULE INTENDED LEARNING OUTCOMES (ILOS)**

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

M1.	Measure various quantitative techniques and methods for cost analysis.
M2.	Determine the impact of cost and management accounting system changes that affect the flexible budgeting and variance analysis for planning and control.
M3.	Justify the uses of traditional volume-based costing systems and activity-based costing system in cost analysis.
M4.	Assess cost-volume-profit analysis for production and sales decision analysis in numerical based situation.
M5.	Evaluate the uses of costing systems for job, joint product, byproduct, and process costing.



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

PILOs	M1	M2	М3	M4	M5
P1. Integrate the contemporary theories, principles of accounting and business disciplines relevant to general business practice.	<b>✓</b>				
P2. Assess general business scenarios with mathematical and statistical skills.				<b>✓</b>	
P3. Apply critical thinking and logical analysis skills and techniques to solve business problems.			<b>✓</b>	<b>√</b>	
P4.Interpret and analyze accounting information for internal control, planning, performance evaluation, and coordination to continuously improve business process.					
P5. Apply accounting or business software for business analysis.					
P6. Develop queries to assess management information from database to improve efficiency and effectiveness.					
P7. Synthesize the latest requirement of international accounting and auditing standards in preparing financial statements and auditing reports.		<b>✓</b>			
P8. Utilize appropriate written and spoken forms to communicate effectively with stakeholders in various cultural environment.					<b>√</b>
P9. Recommend an appropriate module of action by ethically examining the economic, environmental, political, legal and regulatory contexts of global business practice.					
P10. Utilize the latest empirical findings and academic studies to support the recommendation of business projects.					

## MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage (Textbook)	Contact Hours		
	Topic 1: Cost Management and Strategy (Chapter 1)			
1	<ul> <li>Explain the use of cost management information in an organization.</li> <li>Explain the contemporary business environment and how it has influenced cost management.</li> <li>Explain the management techniques and how they are used in cost management.</li> <li>Explain the different types of competitive strategies.</li> <li>Describe the professional environment of the management accountant.</li> </ul>	3		
	<ul> <li>Understand the principles and rules of professional ethics.</li> </ul>			
	Topic 2: Basic cost management concepts (Chapter 3)			
	<ul> <li>Recognize the strategic role of basic cost management concepts.</li> </ul>			
2	<ul> <li>Explain the cost driver concepts.</li> </ul>	3		
	<ul> <li>Explain the cost concepts used in product and service costing.</li> </ul>			
	<ul> <li>Demonstrate how costs flow through the accounts and prepare</li> </ul>			

	and interpret an income statement for both a manufacturing and	
3	<ul> <li>merchandizing company.</li> <li>Topic 3: Job Costing (Chapter 4)</li> <li>Explain the types of costing systems.</li> <li>Explain the strategic role of costings.</li> <li>Explain the flow of costs in a job costing system.</li> <li>Explain the application of factory overhead costs in a job costing system.</li> <li>Calculate underapplied and overapplied overhead and show how it is account for.</li> <li>Apply job costing to a service industry.</li> <li>Explain an operation costing system.</li> <li>Explain how to handle spoilage, rework, and scrap in a job costing system.</li> </ul>	3
4	<ul> <li>Topic 4: Activity-Based Costing and customer profitability analysis         (Chapter 5) (part 1)</li> <li>Explain the strategic role of activity-based costing (ABC).</li> <li>Describe ABC, the steps in developing an ABC system, and the benefits of an ABC system.</li> <li>Determine product costs under both volume-based method and the activity-based method and contrast the two.</li> <li>Explain activity-based management (ABM)</li> <li>Describe how ABC/M is used in organizations.</li> <li>Use and activity-based approach to analyze customer profitability.</li> <li>Identify key factors for successful ABC/M implementation.</li> </ul>	3
5	<ul> <li>Topic 4: Activity-Based Costing and customer profitability analysis (Chapter 5) (part 2)</li> <li>Explain the strategic role of activity-based costing (ABC).</li> <li>Describe ABC, the steps in developing an ABC system, and the benefits of an ABC system.</li> <li>Determine product costs under both volume-based method and the activity-based method and contrast the two.</li> <li>Explain activity-based management (ABM)</li> <li>Describe how ABC/M is used in organizations.</li> <li>Use and activity-based approach to analyze customer profitability.</li> <li>Identify key factors for successful ABC/M implementation.</li> <li>Topic 5: Process costing (Chapter 6) (part 1)</li> <li>Identify the types of organizations for which a process costing system best supports the organization's competitive strategy.</li> <li>Explain and calculate equivalent units.</li> <li>Describe the five steps in process costing.</li> <li>Demonstrate the weighted-average method and FIFO method of process costing.</li> <li>Analyze process costing with multiple departments.</li> <li>Prepare journal entries to record the flow of costs in process costing system.</li> </ul>	3



	<ul> <li>Explain how process costing systems are implemented and</li> </ul>	
	enhanced in practice.	
	Account for spoilage in process costing	
	Topic 5: Process costing (Chapter 6) (part 2)	3
	<ul> <li>Identify the types of organizations for which a process costing</li> </ul>	
	system best supports the organization's competitive strategy.	
	<ul> <li>Explain and calculate equivalent units.</li> </ul>	
	<ul> <li>Describe the five steps in process costing.</li> </ul>	
	<ul> <li>Demonstrate the weighted-average method and FIFO method of</li> </ul>	
6	process costing.	
	<ul> <li>Analyze process costing with multiple departments.</li> </ul>	
	<ul> <li>Prepare journal entries to record the flow of costs in process</li> </ul>	
	costing system.	
	<ul> <li>Explain how process costing systems are implemented and</li> </ul>	
	enhanced in practice.	
	Account for spoilage in process costing	
	Topic 6: Cost Allocation: departments, joint products, and by-	3
	products (Chapter 7)	
	<ul> <li>Identify the strategic role and objectives of cost allocation.</li> </ul>	
	<ul> <li>Explain the ethical issues of cost allocation.</li> </ul>	
7	<ul> <li>Use the three phases of department cost allocation.</li> </ul>	
	Explain the implementation issues of the different department	
	cost allocation methods.	
	<ul> <li>Explain the use of cost allocation in service firms.</li> </ul>	
	<ul> <li>Use the three joint product costing methods.</li> </ul>	
	Use the four by-product costing methods	
8	Mid-term test (flexibly arranged during Week 8 to 10)	3
	Topic 7: Cost estimation (Chapter 8)	3
	<ul> <li>Explain the strategic role of cost estimation.</li> </ul>	
9	<ul> <li>Apply the six steps of cost estimation.</li> </ul>	
5	<ul> <li>Use the high-low and regression analysis method of cost</li> </ul>	
	estimation.	
	Explain the implementation issues of the cost estimation methods	
	Topic 8: Short-term profit planning: CVP analysis (Chapter 9)(Part 1)	
	Explain CVP analysis, the CVP model, and the strategic role of CVP	
	strategic.	
	Apply CVP analysis for breakeven planning and activity-based	
10	costing.	3
	Explain different approaches for dealing with risk and uncertainty	_
	in CVP analysis.	
	<ul> <li>Adapt CVP analysis for multiple product / services and not-for-</li> </ul>	
	profit-organizations.	
	Identity the assumptions and limitations of CVP analysis	
1	Topic 8: Short-term profit planning: CVP analysis (Chapter 9) (part 2)	3
11	Explain CVP analysis, the CVP model, and the strategic role of CVP	
	strategic.	



	Apply CVD analysis factorists as also at the state of	
	Apply CVP analysis for breakeven planning and activity-based	
	costing.	
	<ul> <li>Explain different approaches for dealing with risk and uncertainty</li> </ul>	
	in CVP analysis.	
	<ul> <li>Adapt CVP analysis for multiple product / services and not-for-</li> </ul>	
	profit-organizations.	
	Identity the assumptions and limitations of CVP analysis	
	Topic 9: Operational performance measurement: Sales, Direct Cost	3
		3
	variances and the role of nonfinancial performance measures	
	(Chapter 14) (part 1)	
	<ul> <li>Explain the essence of control systems in general and operational</li> </ul>	
	control systems in particular.	
	<ul> <li>Define and interpret and the total operating income variance for a</li> </ul>	
	given period.	
12	<ul> <li>Develop a general framework for subdividing the total operating</li> </ul>	
12		
	income variance into component variances.	
	<ul> <li>Develop standard costs for product costing, performance</li> </ul>	
	evaluation and control.	
	<ul> <li>Record manufacturing cost flows and associated variances in a</li> </ul>	
	standard cost system.	
	<ul> <li>Discuss major operating functions and the need for nonfinancial</li> </ul>	
	performance indicators.	
		2
	Topic 9: Operational performance measurement: Sales, Direct Cost	3
	variances and the role of nonfinancial performance measures	
	(Chapter 14) (part 2)	
	<ul> <li>Explain the essence of control systems in general and operational</li> </ul>	
	control systems in particular.	
	<ul> <li>Define and interpret and the total operating income variance for a</li> </ul>	
	given period.	
	<ul> <li>Develop a general framework for subdividing the total operating</li> </ul>	
	income variance into component variances.	
	<ul> <li>Develop standard costs for product costing, performance</li> </ul>	
	evaluation and control.	
4.2	<ul> <li>Record manufacturing cost flows and associated variances in a</li> </ul>	
13	standard cost system.	
	<ul> <li>Discuss major operating functions and the need for nonfinancial</li> </ul>	
	performance indicators.	
	· ·	
	Topic 10: Operational performance measurement: indirect cost	
	variances and resource-capacity management (Chapter 15)(part	
	1)	
	<ul> <li>Distinguish between the product-costing and control purposes of</li> </ul>	
	standard costs for factory (manufacturing) overhead.	
	Use flexible budgets to calculate and interpret standard cost	
	variances for factory (manufactory) overhead.	
	Record overhead costs and associated standard cost variances.	
	<ul> <li>Dispose of standard cost variances at the end of a period.</li> </ul>	

	<ul> <li>Apply standard costs to service organizations.</li> <li>Analyze overhead variances in a traditional activity-based costing system.</li> <li>Understand decision rules that can be used to guide the variance-investigation decision.</li> </ul>	
14	<ul> <li>Topic 10: Operational performance measurement: indirect cost variances and resource-capacity management (Chapter 15)(part 2)</li> <li>Distinguish between the product-costing and control purposes of standard costs for factory (manufacturing) overhead.</li> <li>Use flexible budgets to calculate and interpret standard cost variances for factory (manufactory) overhead.</li> <li>Record overhead costs and associated standard cost variances.</li> <li>Dispose of standard cost variances at the end of a period.</li> <li>Apply standard costs to service organizations.</li> <li>Analyze overhead variances in a traditional activity-based costing system.</li> <li>Understand decision rules that can be used to guide the variance-investigation decision.</li> </ul>	3
15	Final Examination	3
	Total	45 hours

### **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	М3	M4	M5
Lectures: in-depth coverage of management accounting is presented with PowerPoint slides and other additional illustration materials as necessary.  Q&A: time allowed to raise questions from both instructor and students.	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
In-class exercises and Q&As will be discussed to direct student attention to the issues.  Formative Quizzes: students will take short oral or written quizzes at the end of the class to review what they learn.	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Assignments / case studies Students are required to complete assigned problems / case studies. No late submission will be accepted.	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$



#### **ATTENDANCE**

Attendance requirements are governed by the "Academic Regulations Governing Bachelor's Degree Programmes" of Macao Polytechnic University. Students who have less than the required attendance for the enrolled module are not eligible to attend the final or re-sit examinations and will be given "F" as their final grade.

#### **ASSESSMENT**

In this learning module, students are required to complete the following assessment activities:

Types of assessment	Weighting	Remarks		MILOs					
Task/Activities	(%)			2	3	4	5		
Q&A/participation/quizzes	5%	Progressive assessment	✓	✓	✓	✓	✓		
Assignments and case studies	15%	Progressive assessment	✓	✓	✓	✓	✓		
Midterm-term	30%	Summative assessment	✓		✓		<b>✓</b>		
Final exam	50%	Summative assessment	✓	✓	✓	✓	✓		
Total	100%								

The assessment will be conducted following the University's Assessment Strategy (see <a href="https://www.mpu.edu.mo/teaching\_learning/en/assessment\_strategy.php">www.mpu.edu.mo/teaching\_learning/en/assessment\_strategy.php</a>). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.



## **MARKING SCHEME**

	Assessment	Criterion	Excellent	Very Good,	Satisfactory	Pass	Fail
	Task		(A, A-)	Good	(C+, C, C-)	(D+, D)	(F)
				(B+, B, B-)			
1.	Class Learning	Demonstrate the	High	Significant	Moderate	Basic	Not even
	Activities	understanding of					reaching
	(including	the subjects					marginal
	participation,	covered in classes					levels
	Q&A, quizzes)	and show active					
_		learning attitude		G1 161 .			
2.	Assignments	Demonstrate the	High	Significant	Moderate	Basic	Not even
		ability to answer					reaching
		questions on topics covered in the					marginal
		outline					levels
3.	Case Studies	Demonstrate the	High	Significant	Moderate	Basic	Not even
Э.	Case studies	understanding of	півіі	Significant	Moderate	Dasic	reaching
		the subject and the					marginal
		arguments are					levels
		articulated and					10 0013
		organized in terms					
		of verbal					
		presentation and					
		report writing					
4.	Mid-term test	Demonstrate the	High	Significant	Moderate	Basic	Not even
	and Final	ability to identify					reaching
	examination	and <b>apply</b>					marginal
		appropriate					levels
		concepts, methods					
		and techniques					



#### **REQUIRED READINGS**

Edward J. Blocher, David E. Stout, Paul E. Juras, Steen Smith, (2022), "Cost Management: A strategic Emphasis", 9<sup>th</sup> ed., McGraw Hill (Ebook / Hardcopy)

#### **REFERENCES**

- Horngren, C.T., Datar, S.M & Rajan, M.V. (2021) "Cost Accounting: A Managerial Emphasis", 17th ed., Prentice Hall
- 2. Drury, C. ,(2021), *Management and Cost Accounting*, 11<sup>th</sup> ed., South-Western Cengage Learning.
- 3. Garrison, R.H., Noreen E.W. and Brewer, P.C., (2021) *Managerial Accounting,* 17th 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 <a href="https://www.mpu.edu.mo/student\_handbook/">www.mpu.edu.mo/student\_handbook/</a>.

#### **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.