

# ILLINOIS VALLEY COMMUNITY COLLEGE



## COURSE OUTLINE

DIVISION: Natural Sciences Business

COURSE: ACT 1020 – Managerial Accounting

Date: 12-12-13

Credit Hours: 3

Prerequisite(s): ACT 1010

Delivery Method:  **Lecture**                      **3 Contact Hours** (1 contact = 1 credit hour)  
 **Seminar**                              **0 Contact Hours** (1 contact = 1 credit hour)  
 **Lab**                                              **0 Contact Hours** (2 contact = 1 credit hour)  
 **Clinical**                                      **0 Contact Hours** (3 contact = 1 credit hour)  
 **Online**  
 **Blended**

Offered:  **Fall**       **Spring**       **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>: NONE

### CATALOG DESCRIPTION:

Course deals with basic managerial accounting concepts and practice including classification of costs, cost-volume-profit relationships, manufacturing costs, job order and process cost systems, budgeting, standard costs and variance analysis, direct and absorption costing, cost allocation, decentralized operations, pricing decisions, capital budgeting, and statement of cash flows.

## GENERAL EDUCATION GOALS ADDRESSED

*[See the last page of this form for more information.]*

### Upon completion of the course, the student will be able:

*[Choose those goals that apply to this course.]*

- To apply analytical and problem solving skills to personal, social and professional issues and situations.
- To communicate orally and in writing, socially and interpersonally.
- To develop an awareness of the contributions made to civilization by the diverse cultures of the world.
- To understand and use contemporary technology effectively and to understand its impact on the individual and society.
- To work and study effectively both individually and in collaboration with others.
- To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.
- To develop and maintain a healthy lifestyle physically, mentally, and spiritually.
- To appreciate the ongoing values of learning, self-improvement, and career planning.

### EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

*[Outcomes related to course specific goals.]*

#### Upon completion of the course, the student will be able to:

#### **1 Managerial Accounting and the Business Environment**

- 1.1 Understand the role of management accountants in an organization.
- 1.2 Understand the basic concepts underlying Lean Production, the Theory of Constraints (TOC), and Six Sigma.
- 1.3 Understand the importance of upholding ethical standards.

#### **2 Managerial Accounting and Cost Concepts**

- 2.1 Understand the major differences and similarities between financial and managerial accounting.
- 2.2 Identify and give examples of each of the three basic manufacturing cost categories.
- 2.3 Distinguish between product costs and period costs and give examples of each.
- 2.4 Prepare an income statement including calculation of the cost of goods sold.
- 2.5 Prepare a schedule of cost of goods manufactured.
- 2.6 Understand the differences between variable costs and fixed costs.
- 2.7 Understand the differences between direct and indirect costs.
- 2.8 Understand cost classification used in making decision differential costs, opportunity costs, and sunk costs.
- 2.9 Properly account to labor costs associated with the time, overtime, and fringe benefits.
- 2.10 Identify the four types of quality costs and explain how they interact.
- 2.11 Prepare and interpret a quality cost report.

### **3 Systems Design: Job-Order Costing**

- 3.1 Distinguish between process costing and job-order costing and identify companies that would use each costing method.
- 3.2 Identify the documents used in a job-order costing system.
- 3.3 Compute predetermined overhead rates and explain why estimated overhead costs rather than actual overhead costs are used in the costing process.
- 3.4 Understand the flow of costs in a job-order costing system and prepare appropriate journal entries to record costs.
- 3.5 Apply overhead cost to Work in Process using a predetermined overhead rate.
- 3.6 Prepare schedules of cost of goods manufactured and cost of goods sold.
- 3.7 Use T-accounts to show the flow of costs in a job-order costing system.
- 3.8 Compute underapplied or overapplied overhead cost and prepare the journal entry to close the balance in Manufacturing Overhead to the appropriate accounts.
- 3.9 Understand the implications of basing the predetermined overhead rate on activity at capacity rather than on estimated activity for the period.

### **4 Systems Design: Process Costing**

- 4.1 Record the flow of materials, labor, and overhead through a process costing system.
- 4.2 Compute the equivalent units of production using the weighted-average method.
- 4.3 Compute the cost per equivalent unit using the weighted-average method.
- 4.4 Assign costs to units using the weighted-average method.
- 4.5 Prepare a cost reconciliation report.
- 4.6 Compute the equivalent units of production using the FIFO method.
- 4.7 Compute the cost per equivalent unit using the FIFO method.
- 4.8 Assign costs to units using the FIFO method.
- 4.9 Prepare a cost reconciliation report using the FIFO method.
- 4.10 Allocate service department costs to operating departments using the direct method.
- 4.11 Allocate service department costs to operating departments using the step-down method.

### **5 Cost Behavior: Analysis and Use**

- 5.1 Understand how fixed and variable costs behave and how to use them to predict costs.
- 5.2 Use a Scattergraph plot to diagnose cost behavior.
- 5.3 Analyze a mixed cost using the high-low method.
- 5.4 Prepare an income statement using the contribution format.
- 5.5 Analyze a mixed cost using the least-squares regression method.

## **6 Cost-Volume-Profit Relationships**

- 6.1 Explain how changes in activity affect contribution margin and net operating income.
- 6.2 Prepare and interpret a cost-volume-profit (CVP) graph and a profit graph.
- 6.3 Use the contribution margin ratio (CM ratio) to compute changes in contribution margin and net operating income resulting from changes in sales volume.
- 6.4 Show the effects on contribution margin of changes in variable costs, fixed costs, selling price, and volume.
- 6.5 Determine the level of sales needed to achieve a desired target profit.
- 6.6 Determine the break-even point.
- 6.7 Compute the margin of safety and explain its significance.
- 6.8 Compute the degree of operating leverage at a particular level of sales and explain how it can be used to predict changes in net operating income.
- 6.9 Compute the break-even point for a multiproduct company and explain the effects of shifts in the sales mix on contribution margin and the break-even point.

## **7 Variable Costing: A Tool for Management**

- 7.1 Explain how variable costing differs from absorption costing and compute unit product costs under each method.
- 7.2 Prepare income statements using both variable and absorption costing.
- 7.3 Reconcile variable costing and absorption costing net operating incomes and explain why the two amounts differ.
- 7.4 Understand the advantages and disadvantages of both variable and absorption costing.

## **8 Activity-Based Costing: A Tool to Aid Decision Making**

- 8.1 Understand activity-based costing and how it differs from a traditional costing system.
- 8.2 Assign costs to cost pools using a first-stage allocation.
- 8.3 Compute activity rates for cost pools.
- 8.4 Assign costs to a cost object using a second-stage allocation.
- 8.5 Use activity-based costing to compute product and customer margins.
- 8.6 Prepare action analysis report using activity-based costing data and interpret the report.
- 8.7 Use activity-based costing techniques to compute unit product costs for external reports.

## **9 Profit Planning**

- 9.1 Understand why organizations budget and the processes they use to create budgets.
- 9.2 Prepare a sales budget, including a schedule of expected cash collections.
- 9.3 Prepare a production budget.
- 9.4 Prepare a direct materials budget, including a schedule of expected cash disbursements for purchases of materials.
- 9.5 Prepare a direct labor budget.
- 9.6 Prepare a manufacturing overhead budget.
- 9.7 Prepare a selling and administrative expense budget.
- 9.8 Prepare a cash budget.
- 9.9 Prepare a budgeted income statement.
- 9.10 Prepare a budgeted balance sheet.

## **10 Flexible Budgets and Performance Analysis**

- 10.1 Prepare a flexible budget.
- 10.2 Prepare a report showing activity variances.
- 10.3 Prepare a report showing revenue and spending variances.
- 10.4 Prepare a performance report that combines activity variances and revenue and spending variances.
- 10.5 Prepare a flexible budget with more than one cost driver.
- 10.6 Understand common errors made in preparing performance reports based on budgets and actual results.

## **11 Standard Costs and Operating Performance Measures**

- 11.1 Explain how direct materials standards and direct labor standards are set.
- 11.2 Compute the direct materials price and quantity variances and explain their significance.
- 11.3 Compute the direct labor rate and efficiency variances and explain their significance.
- 11.4 Compute the variable manufacturing overhead rate and efficiency variances.
- 11.5 Compute delivery cycle time, throughput time, and manufacturing cycle efficiency (MCE).
- 11.6 Compute and interpret the fixed overhead budget and volume variances.
- 11.7 Prepare journal entries to record standard costs and variances.

## **12 Segment Reporting, Decentralization, and the Balanced Scorecard**

- 12.1 Prepare a segmented income statement using the contribution format, and explain the difference between traceable fixed costs and common fixed costs.
- 12.2 Compute return on investment (ROI) and show how changes in sales, expenses, and assets affect ROI.
- 12.3 Compute residual income and understand its strengths and weaknesses.
- 12.4 Understand how to construct and use a balanced scorecard.
- 12.5 Determine the range, if any, within which a negotiated transfer price should fall.
- 12.6 Charge operating departments for services provided by service departments.

### **13 Relevant Costs for Decision Making**

- 13.1 Identify relevant and irrelevant costs and benefits in a decision.
- 13.2 Prepare an analysis showing whether a product line or other business segment should be dropped or retained.
- 13.3 Prepare a make or buy analysis.
- 13.4 Prepare an analysis showing whether a special order should be accepted.
- 13.5 Determine the most profitable use of a constrained resource and the value of obtaining more of the constrained resource.
- 13.6 Prepare an analysis showing whether joint products should be sold at the split-off point or processed further.

### **14 Capital Budgeting Decisions**

- 14.1 Evaluate the acceptability of an investment project using the net present value method.
- 14.2 Evaluate the acceptability of an investment project using the internal rate of return method.
- 14.3 Evaluate an investment project that has uncertain cash flows.
- 14.4 Rank investment projects in order of preference.
- 14.5 Determine the payback period for an investment.
- 14.6 Compute the simple rate of return for an investment.
- 14.7 Understand present value concepts and the use of present value tables.
- 14.8 Include income taxes in a capital budgeting analysis.

### **COURSE TOPICS AND CONTENT REQUIREMENTS:**

- 1. Managerial Accounting and the Business Environment
- 2. Managerial Accounting and Cost Concepts
- 3. Systems Design: Job-Order Costing
- 4. Systems Design: Process Costing
- 5. Cost Behavior: Analysis and Use
- 6. Cost-Volume-Profit Relationships
- 7. Variable Costing: A Tool for Management
- 8. Activity-Based Costing: A Tool to Aid Decision Making
- 9. Profit Planning
- 10. Flexible Budgets and Performance Analysis
- 11. Standard Costs and Operating Performance Measures
- 12. Segment Reporting, Decentralization, and the Balanced Scorecard
- 13. Relevant Costs for Decision Making
- 14. Capital Budgeting Decisions

**INSTRUCTIONAL METHODS:**

1. Exercises and problems
2. Quizzes
3. Exams
4. Excel Assignments

**INSTRUCTIONAL MATERIALS:**

*Managerial Accounting*, Garrison, Noreen, Brewer, 14<sup>th</sup> Edition

**STUDENT REQUIREMENTS AND METHODS OF EVALUATION:**

1. Read and understand text
2. Class participation
3. Complete all homework assignments (These should include at least 6 spreadsheet problems to be solved using Excel.)
4. Quizzes
5. Exams, including comprehensive, departmental final

**OTHER REFERENCES**

*Managerial Accounting Work/Study Guide*, 14th Edition, Irwin

# Course Competency/Assessment Methods Matrix

ACT 1020 Managerial Accounting		Assessment Options																																
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment		
	Direct/ Indirect	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D								
Ability to understand and apply and use managerial terms								X	X			X								X													X	
Ability to apply cost-volume-profit analysis								X	X			X								X													X	
Ability to understand cost flows throughout an accounting system								X	X			X								X													X	
Ability to properly value inventory and understand the effects of inventory valuation issues								X	X			X								X													X	
Ability to develop budget schedules								X	X			X								X													X	
Ability to apply direct, variable, absorption, and standard costing concepts								X	X			X								X													X	
Ability to understand and calculate relevant costs								X	X			X								X													X	
Ability to prepare segment analysis								X	X			X								X													X	
Ability to calculate transfer pricing								X	X			X								X													X	
Ability to demonstrate basic capital budgeting techniques								X	X			X								X													X	
Ability to use Excel in developing basic managerial accounting work sheets																																	X	