



THE CORE & SPECIAL COMPETENCIES MODEL FOR MANAGERIAL ACCOUNTING 1C -- DE ANZA COLLEGE

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THE CALIFORNIA CORE COMPETENCY MODEL WITH SPECIAL COMPETENCIES -- DE ANZA COLLEGE

SOME SPECIFIC NOTES ABOUT OUR COMPETENCY MODEL

- The primary objective of this course is to help students learn how accounting meets the information needs of various *users* by developing and communicating information that is useful for decision-making. This objective will be achieved by requiring the following outcomes, core and special competencies. Appendix A explains the difference between outcomes, core and special competencies.
- The outcomes and core competencies you see are derived from the Accounting Education Change Commission's Position Statement Number Two entitled The First Course in Accounting. We strongly recommend that you study this document as background preparation before you view our model.
- Like the AECC, we define the first course in accounting to mean the full introductory accounting sequence taught at De Anza College over three quarters (Financial Accounting 1A, 1B and Managerial Accounting 1C).
- Do not interpret the user orientation of our financial accounting outcomes and competencies to mean that you should no longer prepare statements. Although we do not include the traditional detailed treatment of debits and credits in the core competencies, we do want students to develop the skills needed to intelligently *use* such financial reports as are found in an annual report. Accordingly, students must be able to prepare simple financial statements.
- Our model contains twelve outcomes divided into three categories of competencies: financial accounting (31 competencies), managerial accounting (29 competencies), and active learning (9 competencies). The active learning skills are intended to facilitate accounting content. Also, the competencies are not designed to be mutually exclusive. That is, when you analyze a case study in a group setting, the assignment may also involve one or more communication skills and problem solving skills.
- Some of the competencies have been duplicated in one or more courses. Additionally, some have been deleted from a particular course. Whenever possible content notes have been added for your convenience.

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Message to Instructors and Student: The primary objective of this course is to help students learn how accounting meets the information needs of various users by developing and communicating information that is useful for decision-making. This objective will be achieved by requiring the following outcomes, core and special competencies.

Managerial Accounting Outcomes With Core & Special Competencies

6 Role of the Management Accountant

- Distinguish between the usefulness of managerial and financial accounting by considering the activities of planning, evaluating, controlling, and decision-making.
- Explain why managerial accounting applies to all types of industries (e.g., merchandising, manufacturing, non-financial services, financial services, government and other nonprofit entities).
- Describe different ways in which the management accountant's advice can help an entity to operate more effectively.
- Analyze a company's financial statements and/or management reports and identify several strengths and several weaknesses of the company from this analysis.

Part B: Why do management accountants need to have both a broad and in-depth understanding of their entity to fully participate in decisions about the products and services provided?

- Discuss, using specific examples, the cause and effect relationship between expenses and revenues and how they affect operating decisions.
- Discuss the need for and uses of a management control system and how accounting information facilitates control.
- Explain how the operating philosophies of continuous improvement, total quality management and just-in-time manufacturing are used to manage optimal inventory levels; and discuss how the accounting function can be used to support their implementation.

Special Competencies For:

- Part A: How does management accounting differ from that of financial accounting and what role does the management accountant play as a member of the management team?
 - <u>The Managerial Accountant in the Organization;</u>
 - Describe the differences between managerial and financial accounting.
 - Evaluate the organizational role of management accountants.
 - Define and illustrate materials, factory labor, and factory overhead costs.
- Part B: Why do management accountants need to have both a broad and in-depth understanding of their entity to fully participate in decisions about the products and services provided?
 - Job and Process Costing;
 - Describe accounting systems used by manufacturing businesses.
 - Describe and prepare summary journal entries for a job order cost accounting system.
 - Use job order cost information for decision-making.

Part A: How does management accounting differ from that of financial accounting and what role does the management accountant play as a member of the management team?

- Diagram the flow of costs for a service business that uses a job order cost accounting system.
- Distinguish between job order costing and process costing systems.
- Explain and illustrate the physical flows and cost flows for a process manufacturer.
- Calculate and interpret the accounting for completed and partially completed units under the FIFO method.
- Prepare the cost of production report.
- Prepare journal entries for transactions of a process manufacturer.
- Use cost of production reports for decision-making.
- Contrast jus-in-time processing with conventional manufacturing practices.
- Oral Communication:
 - Deliver messages with clarity.
 - Follow oral directions.
 - Participate in-group discussions.
- Written Communication;
 - Organize thoughts into expressive written forms.
 - Proofread, edit and revise written documents.
 - Use correct grammar and spelling in writing.
- Reading;
 - Investigate meaning of unknown words.
 - Extract the main ideas of messages.
 - Identify relevant details, facts and specifications from reading.

7 Using Accounting Information To Make Decisions

Part A: How is accounting information used to make and communicate short-term management decisions needed to run the entity?

- Distinguish between fixed costs, variable costs, and mixed costs by categorizing various costs of an entity into these three categories.
- Explain the usefulness and discuss the limitations of Cost-Volume-Profit (CVP) analysis as a decision making tool.
- Read a CVP graph and explain the significance of the components illustrated.
- Calculate fixed and variable costs, contribution margin, contribution margin ratio, break-even point in sales dollars and units, and target sales volume in dollars and units.
- Calculate the effects of changes in sales volume, sales price, variable costs and/or fixed costs on company contribution margin, break-even point, and operating income for both multiproduct and single-product situations.
- Explain how pricing decisions are made, including transfer pricing decisions.
- Identify the relevant costs in a make-or-buy decision and discuss both the qualitative and quantitative factors considered in this decision.
- Part B: How is accounting information used to make and communicate long-term strategic decisions needed to position the firm for competitive advantage?
 - Identify and explain the long-term strategic decisions that management needs to make.
 - Calculate both return on investment (ROI) and residual income (RI) and explain how each method is used.

Please Note: Some of the core competencies have been removed and will be used in Financial Accounting 1A and 1b

Special Competencies For:

- Part A: How is accounting information used to make and communicate short-term management decisions needed to run the entity?
 - <u>Cost Behavior & Cost-Volume-Profit Analysis (CVP);</u>
 - Classify cost by their behavior:
 - o Variable, or
 - o Fixed.
 - Compute contribution margin and ratio by total costs and/or by unit costs.
 - Explain how they help managers make decisions.
 - Using contribution margin, determine:
 - o Breakeven point in units and total sales, and
 - o Breakeven point necessary to achieve a targeted profit in units and total sales.
 - Compute margin of safety and operating leverage, and explain how this information benefits managers.
 - List the assumptions underlying C-V-P.
 - <u>Differential Analysis;</u>
 - Prepare differential analysis for the following types of decision making:
 - o Leasing or selling equipment,
 - o Discontinuing an unprofitable segment,
 - o Manufacturing or purchase a needed part,
 - o Replacing usable fixed asset,
 - o Process further or not, and
 - o Accepting additional business at a special price.
 - Determine the selling price of a product using:
 - o Total costs,
 - o Product costs, and
 - o Variable costs.
- Part B: How is accounting information used to make and communicate long-term strategic decisions needed to position the firm for competitive advantage?
 - Investment Ratios;
 - Computer and interpret the rate of return on investment (ROI) and residual income (RI).
 - <u>Capital Budgeting;</u>
 - Explain the nature and importance of capital investing analysis.
 - Evaluate capital investment proposals using the following methods:
 - o Average rate of return,
 - o Cash payback,
 - o Net present value, and
 - o Internal rate of return (IRR).
 - List and describe factors that complicate capital investment analysis.
 - Diagram the capital rationing process.
 - Oral Communication;
 - Deliver messages with clarity.
 - Follow oral directions.
 - Participate in-group discussions.
 - Written Communication;
 - Organize thoughts into expressive written forms.

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- Proofread, edit and revise written documents.
- Use correct grammar and spelling in writing.
- Reading;
 - Investigate meaning of unknown words.
 - Extract the main ideas of messages.
 - Identify relevant details, facts and specifications from reading.
- 8 Using Accounting Information To Analyze and Improve Operational Efficiency: How is accounting information used to analyze and improve efficiency in operating, financing, and administering the entity?
 - Explain the purposes of budgets and prepare both a simple operating budget and a simple cash budget.
 - Explain the relationship between budgeting and strategic planning.
 - Discuss the limitations of budgets in managing organizations.
 - Explain the relationship between accounting budgets and non-financial performance measures, e.g. cycle time, defect rate, and on-time delivery.
 - Explain how the concept of responsibility accounting applies to cost centers, profit centers, and investment centers.
 - Distinguish between controllable and non-controllable costs and discuss why the distinction is important.
 - Explain how the concept of cost control is used to compare budgeted to actual amounts and to interpret any significant variances.

Special Competencies For: Using Accounting Information To Analyze and Improve Operational Efficiency: How is accounting information used to analyze and improve efficiency in operating, financing, and administering the entity?

- Centralization & Decentralized Operations;
 - List and explain the advantages and disadvantages of decentralized operations.
 - Prepare a responsibility accounting report for a:
 - o Cost center,
 - o Revenue center,
 - o Profit center, and
 - o Investment center.
 - Explain how the market price, negotiated price and cost price approaches to calculate transfer prices are used.
- <u>Budgeting;</u>
 - Describe budgeting; it's objectives, and its impact on human behavior.
 - Describe the basic elements of the budget process, the two major types of budgeting, and the use of computes in the budgeting.
 - Describe the master budget for a manufacturing business.
 - Prepare the basic budgeted:
 - o Income statement,
 - o Balance sheet,
 - o Statement of owner's equity, and
 - o Statement of cash flows.
- Oral Communication;
 - Deliver messages with clarity.
 - Follow oral directions.

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- Participate in-group discussions.
- Written Communication:
 - Organize thoughts into expressive written forms.
 - Proofread, edit and revise written documents.
 - Use correct grammar and spelling in writing.
- Reading:
 - Investigate meaning of unknown words.
 - Extract the main ideas of messages.
 - Identify relevant details, facts and specifications from reading.
- Mathematics Usage;
 - Use measuring tools and systems.
 - Use basic computational skills.
 - Use graphic formats to display and obtain information.

9 Processing Managerial Accounting Information: What is the importance and proper use of automated information processing in managerial accounting?

- Identify alternative ways costs are tied to inventory and expense accounts (including the systematic and rational allocation associated with financial accounting).
- Trace the flow of costs in both a job order cost and process cost manufacturing system.
- Explain the causes and appropriate dispositions of over-applied and under-applied manufacturing overhead.
- Distinguish between a periodic and a perpetual inventory system for a merchandiser and a manufacturer.
- Describe the information benefits of maintaining a perpetual inventory.
- Distinguish between an activity-based cost accounting system and a traditional cost accounting system.

Special Competencies For: Processing Managerial Accounting Information: What is the importance and proper use of automated information processing in managerial accounting?

- <u>Standards;</u>
 - Describe the types of standards and how they are established for business.
 - Explain and illustrate how standards are used in budgeting.
 - Calculate the following variances:
 - o Material:
 - Price, and
 - Quantity.
 - o Labor:
 - Rate, and
 - Efficiency.
 - o Variable overhead:
 - Spending, and
 - Efficiency.
 - o Fixed overhead:
 - Budgeted, and
 - Volume.
 - Journalize the entries for recording variances.
 - Prepare an income statement that includes variances.
 - Explain how standards may be used for non-manufacturing expenses.

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- Oral Communication;
 - Deliver messages with clarity.
 - Follow oral directions.
 - Participate in-group discussions.
- Written Communication;
 - Organize thoughts into expressive written forms.
 - Proofread, edit and revise written documents.
 - Use correct grammar and spelling in writing.
- Reading:
 - Investigate meaning of unknown words.
 - Extract the main ideas of messages.
 - Identify relevant details, facts and specifications from reading.
- <u>Mathematics Usage;</u>
 - Use measuring tools and systems.
 - Use basic computational skills.
 - Use graphic formats to display and obtain information.

Active Learning Outcomes With Core & Special Competencies

10 Communication Skills: How can students demonstrate their ability to communicate effectively in both oral (speaking and listening) and written form?

- Engage in one or more of the following in-class speaking activities:
 - Summarize an accounting-related newspaper or magazine article
 - Present an accounting concept or homework problem applying a concept
 - Debate at least one side of an accounting issue
 - Present an analysis of an assigned case
 - Present the results of a research assignment or project
- Engage in one or more of the following in-class listening activities:
 - Listen to someone speak, summarize what they say, and ask them for feedback about your summary
 - Listen to someone's response to a question or assignment and compare it to your own
 - Compare notes you have taken to those taken by another student and evaluate the effectiveness of your listening skills
- Engage in one or more of the following written communication activities:
 - Accumulate a written record of the concepts and terminology
 - Learned in the course, e.g. a writing journal
 - Summarize the content of assigned readings, e.g. a reading log
 - Describe what was learned in class, e.g. a one-minute response
 - Submit questions about concepts or problems
 - Submit potential exam questions
 - Respond to discussion questions or cases
 - Respond in essay form to questions in quizzes and exams
 - Submit an essay describing a particular issue

Please Note: Some of the core competencies have been removed and will be used in Financial Accounting 1A and 1b

Special Competencies For: How can students demonstrate their ability to communicate effectively in both oral (speaking and listening) and written form?

- <u>Computer Usage;</u>
 - Use word-processing; communications.
 - Use a graphic program;
 - Use a spreadsheet program; database.
- <u>Technology Usage;</u>
 - Set up appropriate machines and equipment.
 - Produce a product using technology.
 - Maintain and troubleshoot technology.
- Oral Communication;
 - Deliver messages with clarity.
 - Follow oral directions.
 - Participate in-group discussions.
- Written Communication;
 - Organize thoughts into expressive written forms.
 - Proofread, edit and revise written documents.
 - Use correct grammar and spelling in writing.
- Reading;
 - Investigate meaning of unknown words.
 - Extract the main ideas of messages.
 - Identify relevant details, facts and specifications from reading.
 - Mathematics Usage;
 - Use measuring tools and systems.
 - Use basic computational skills.
 - Use graphic formats to display and obtain information.

11 Group Work Skills: How can students demonstrate their ability to work effectively in groups?

- Participate in groups whose task is to do one or more of the following:
 - Solve problems
 - Discuss readings from the financial press
 - Analyze financial statements
 - Analyze case studies
- Perform the following tasks that are commonly associated with collaborative or cooperative learning:
 - Facilitate the discussion and keep the group on task
 - Record the group's results
 - Report the results of the group's work to the class
 - Keep time, assist the leader, and fill vacant roles

Special Competencies For: How can students demonstrate their ability to work effectively in groups?

- Resourcing;
 - Schedule time to meet task/project deadlines.
 - Select appropriate human and material resources.
 - Allocate human and material resources to complete a task/project.
- <u>Oral Communications</u>; Participate in-group discussions.

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- <u>Leadership;</u>
 - Organize group work.
 - Involve all group members.
 - Set positive examples for others.
- Group Dynamics;
 - Contribute ideas, suggestions and efforts for completion of group tasks.
 - Solve conflict in positive ways.
 - Cooperate as a member of a multi-ethnic, mixed gender team.
- <u>Responsibility;</u>
 - Display punctuality and regular attendance.
 - Meet deadlines and complete tasks.
 - Take care of materials and equipment; respect others' property.
- <u>Self Confidence;</u>
 - Assess and evaluate criticism.
 - Demonstrate Initiative.
- <u>Self Management;</u>
 - Exhibit self-control.
 - Work without close supervision.
 - Evaluate and monitor personal performance.
- Integrity;
 - Exhibit trustworthy behavior.
 - Respect rights and property of others.
- <u>Sociability;</u>
 - Compromise.
 - Exhibit sensitivity to the attitudes, values and feelings of others.

12 Problem Solving Skills: How can students demonstrate their ability to reason creatively and critically rather than to memorize?

- Identify the problem, alternate ways of solving the problem, alternate positions, and position arguments for a controversial issue.
- Identify the assumptions and possible positions underlying an ethical issue.
- Evaluate a speaker's or writer's content for the appearance of underlying assumptions and of facts versus opinions.
- Analyze an unstructured problem that has no single correct answer.

Special Competencies For: How can students demonstrate their ability to reason creatively and critically rather than to memorize?

- Information Processing;
 - Select and evaluate information.
 - Select ways to organize information.
 - Interpret and communicate information.
 - Technology Usage; Produce a product using technology.
- Mathematics Usage;
 - Use measuring tools and systems.
 - Use basic computational skills.
 - Use graphic formats to display and obtain information.
 - Problem Solving;
 - Identify and define problems/issues.

Please Note: Some of the core competencies have been removed and will be used in Financial Accounting 1A and 1b

- Generate and select from alternative strategies to solve problems.
- Consider consequences of actions.
- Make informed decisions.
- <u>Sociability;</u>
 - Compromise.
 - Exhibit sensitivity to the attitudes, values and feelings of others.
- <u>Personal Identification;</u>
 - Produce a portfolio.
 - Produce a resume.

APPENDIX A DEFINITIONS: OUTCOMES AND COMPETENCIES

HOW DO YOU DISTINGUISH AN OUTCOME FROM A COMPETENCY?

An outcome is "what" you are expected to achieve, whereas a competency demonstrates "how" you can achieve that outcome. Think of an outcome as an end and a competency as a means to that end.

Outcomes are the knowledge and skills recommended in the AECC's Position Statement Number Two entitled The First Course in Accounting. Competencies are the specific activities used to measure a student's mastery of the knowledge/skills or outcomes,

The outcome /competency approach is different from the traditional textbook/topic approach to accounting instruction. First, the choice of a textbook no longer dictates the organization and coverage of the course. Instead, the outcomes and competencies become the driver and the textbook becomes their vehicle. A related difference is that the course is driven by an output measure (outcomes/competencies) rather than an input measure (textbook/topics). Finally, you will clearly know the content what you are expected to study and the precise activities they must perform on examinations and other forms of evaluation by studying the outcome/competency pairings and working problems that reflect them.

AN EXAMPLE OF THE DISTINCTION

Outcome: Students completing the first accounting course should understand the elements of, the relationships among, and the accounting concepts underlying the primary financial statements. This understanding will be implemented if students can:

<u>Competency 1:</u> Discuss what information is typically found in the balance sheet, income statement, statement of owners' equity, and statement of cash flows.

<u>Competency 2</u>: Apply the fundamental accounting equation to prepare a balance sheet that reports the financial condition of any entity (e.g., a person, sole proprietorship, partnership, corporation, etc.).

HOW DO YOU DISTINGUISH CORE COMPETENCIES FROM SPECIAL COMPETENCIES?

The task force's articulation approach includes both core competencies and special competencies.

Core competencies are required of students in all accounting programs that subscribe to the outcome/competency articulation approach. Special competencies are competencies that are required by an individual accounting program to meet the special needs of its students.

WHAT COMPETENCIES ARE REQUIRED FOR ARTICULATION?

As the name implies, a core competency is an essential component of an articulation agreement, whereas a special competency is not. If a two-year program can document that its students are required to satisfy all of the core competencies, its course fulfills the articulation agreement. It is not required to fulfill any of the four-year program's special competencies. For a more concrete understanding, consider the following example:

<u>Core Competency:</u> Record the effects of accounting transactions in an accounting information system.

Special Competency: Record accounting transactions in journal entry form (i.e., debit-credit form).

Please Note: Some of the core competencies have been removed and will be used in Financial Accounting 1A and 1b

APPENDIX B Demonstration of Mastery of Competency

Since the competencies are interlinked, the following suggested demonstrations are meant to cover more than one competency. A successful student will be able to complete the following assignments after taking the Managerial Accounting 1C course. The demonstration assignments are:

Discussion questions: You should be able to provide a written discussion on the following questions.

- 1. What are the major differences between managerial accounting and financial accounting?
- 2. Differentiate between a department with line responsibility and a department with staff responsibilities.
- 3. What are the three costs that make up the costs of manufactured a product?
- 4. Name the three inventory accounts for a manufacturing business and what does each balance represent at year-end?
- 5. Name the two principle types of cost accounting.
- 6. What are the differences between direct and indirect costs? Give examples of each.
- 7. What are the differences between product and period costs? Give examples of each.
- 8. What kind of company would use job and/or process costing? What type of costing does Apple Computer (<u>http://www.apple.com/</u>) Hewlett Packard (<u>http://www.hp.com/</u>) or IBM (<u>http://www.ibm.com/</u>) use?
- 9. What are the similarities among cost of goods sold for a manufacturing company and cost of merchandise sold of a merchandising company?
- 10. What is the purpose of material requisitions and time cards, and how are they used?
- 11. Discuss how predetermined factory overhead rates are used, and what do you do with any differences between actual and applied overhead?
- 12. Differentiate between a job cost sheet and a production report.
- 13. What do equivalent units mean?
- 14. What are transferred-out materials?
- 15. What are the steps for determining the cost of goods completed and the ending inventory using process costing?
- 16. What are the two groups of manufacturing costs are referred to as conversion costs?
- 17. What is just-in-time processing?
- 18. What are the three most common classification of cost behavior?
- 19. How does total variable cost behave with changes in total units produced?
- 20. How does per unit fixed cost behave with changes in total units produced?
- 21. Differentiate between contribution and historical income statements.
- 22. Explain how contribution margin is used to calculate break-even points.
- 23. What are the three major objectives of budgeting?
- 24. What are the major reporting centers?
- 25. Under what circumstances is a static budget appropriate?
- 26. Describe the budgeting process starting with a sales forecast.
- 27. A cash budget purpose is important in what way?
- 28. What are the basic objectives in the use of standard costs?
- 29. How does standards help management control costs?
- 30. Describe the following variances:
 - a. Material price variance,
 - b. Material quantity variance,
 - c. Direct rate variance,
 - d. Direct efficiency variance,
 - e. Variable overhead spending variance,
 - f. Variable overhead effciency variance,
 - g. Fixed overhead budget variance, and
 - h. Fixed overhead volume variance.
- 31. Differentiate between cost, profit, and investment center.
- 32. What are the two major performance measures used in evaluating investment centers?

- 33. In a decentralized company in which the divisions are organized as investment centers, how could a division be considered a least profitable even though it earned the largest amount of income from operations?
- 34. Why would a firm use non-financial measures in evaluating divisional performance?
- 35. If division managers cannot agree among themselves on a transfer price when using the negotiated price approach, how should the transfer price be term?
- 36. Differential revenue, differential cost, and differential income have what aspects in common?
- 37. In the long run the normal selling price must be set high enough to comer what factors?
- 38. What are the two primary methods of setting prices?
- 39. In using the product cost concept of applying the cost-plus approach to product pricing, what factors are included in the markup?
- 40. What are the important aspects of target pricing?
- 41. Why is the present value method important in capital investment analysis?
- 42. What other methods can be used to conduct capital investment analysis?
- 43. Describe the internal rate of return for conducting capital investment analysis.

<u>Problems and exercises</u>: You should be able to use any first year accounting textbook and solve the following types of problems.

- 1. Classify factory overhead costs.
- 2. Classify costs as to product or period costs.
- 3. Classify costs as to material, labor, or factory overhead.
- 4. Prepare a cost of goods manufactured and cost of goods sold for a manufacturing company.
- 5. Determine the cost of materials issued using the FIFO method.
- 6. Basic accounting entries for indirect material, indirect material, direct labor, and indirect labor.
- 7. Determine factory overhead rates, basic accounting entries, and ending balances.
- 8. Basic accounting entries for factory costs and jobs completed and uncompleted.
- 9. Prepare a cost of production report.
- 10. Classify cost as to their behavior.
- 11. Prepare a contribution margin income statement.
- 12. Determine break-even-points in terms of sales dollars and units, for a single product of a sales mix.
- 13. Determine the margin of safety and operating leverage.
- 14. Prepare an operating budget for a manufacturing company.
- 15. Prepare a flexible budget for a manufacturing company.
- 16. Calculate the following variances,
 - a. Material price variance,
 - b. Material quantity variance,
 - c. Direct rate variance,
 - d. Direct efficiency variance,
 - e. Variable overhead spending variance,
 - f. Variable overhead efficiency variance,
 - g. Fixed overhead budget variance, and
 - h. Fixed overhead volume variance.
- 17. Performance evaluation report of budget versus actual costs.
- 18. Calculate the following:
 - a. Rate of return on investment,
 - b. Residual income,
 - c. Profit margin,
 - d. Asset turnover,
 - e. Transfer pricing, and
 - f. Mark-up rates (percentage and cost plus methods),
- 19. Conduct a differential analysis using several senarios.
- 20. Perform a capital investment using:
 - a. Present value methods, and
 - b. Average rate of return method.

<u>Case Studies:</u> Your should be able to successfully complete the following case studies in a timely fashion.

- 1. Dave Stringer Enterprises,
- 2. Ken Harper Gourmet Vinegars.

<u>Ratios:</u> Your should be able to calculate the following ratios.

- 1. Predetermined overhead rates,
- 2. Equivalent units of production,
- 3. Contribution margin ratio,
- 4. Break-even-point (in sales dollars and in units),
- 5. Margin of safety,
- 6. Operating leverage,
- 7. Rate of return on investment,
- 8. Residual income,
- 9. Profit margin,
- 10. Mark-up,
- 11. Average rate of return,
- 12. Cash payback,
- 13. Internal rate of return (IRR).

<u>Vocabulary:</u> You should be familiar with the following business and accounting terminology.

Activity based	Activity-based costing	Controller	Conversion costs	Cost accounting system
Cost	Cost allocation	Cost of goods sold	Direct labor cost	Direct materials cost
Factory overhead cost	Financial accounting	Finished goods inventory	Job cost sheet	Job order cost system
Managerial accounting	Materials inventory	Materials requisitions	Over applied factory overhead	Period costs
Predetermined factory overhead rate	Product costs	Receiving report	Under applied factory overhead	Work in process
Production report	Cost per equivalent unit	Equivalent units of production	First-in, first-out (FIFO) cost method	Just-in-time processing
Transferred-out costs	Yield	Conversion costs	Activity based drivers	Break-even-point
Contribution margin	Contribution margin ratio	Cost behavior	Cost-volume-profit analysis	Fixed costs
High-low method	Margin of safety	Mixed costs	Variable costs	Operating leverage
Operating profit	Relevant range	Sales mix	Unit contribution margin	Direct costing
Variable costing	Budget	Capital expenditures budget	Cash budget	Continuous budgeting
Cost of goods sold budget	Direct material purchases budget	Flexible budget	Goal conflict	Master budget
Production budget	Responsibility center	Sales budget	Static budget	Zero-based budgeting
Budget performance report	Controllable variance	Currently attainable standards	Direct labor rate variance	Direct labor time variance
Direct materials price variance	Direct materials quantity variance	Variable overhead spending variance	Variable overhead efficiency variance	Fixed overhead budget variance

Fixed overhead volume variance	Non-financial performance measures	Standard costs	Standard cost system	Theoretical standards
Controllable expense	Cost centers	Cost price approach	Decentralization	Division
Income from operations	Investment center	Investment turnover	Market price approach	Negotiated price approach
Profit center	Profit margin	Rate of return on investment	Residual income	Responsibility accounting
Service department charges	Transfer price	Differential analysis	Differential analysis	Markup
Opportunity cost	Production cost concept	Sunk cost	Target cost concept	Theory of constraints (TOC)
Total cost concept	Variable cost concept	Annuity	Average rate of return	Capital investment analysis
Capital rationing	Cash payback period	Deflation	Inflation	Internal rate of return method
Net present value method	Present value concept	Present value index	Present values of an annuity	Time value of money concept