This course of study outlines a sequence of learning activities that have been designed to help you demonstrate competence in Advanced Business Concepts: Economics, Marketing, and Quantitative Analysis. Your competence will be assessed by an objective assessment (ABC3). This course of study may take up to fifteen weeks to complete, depending on your educational background, work experience, and the time you are able to dedicate to your studies. Consult with your mentor if you wish to accelerate your progress through this course of study.

Following this document sequentially is an important part of your assessment preparation. Completing your assessments within your Course Mentor's suggested time line leads to meeting SAP goals and graduation.

**Introduction**

Welcome to the Advanced Business Concepts: Economics, Marketing, and Quantitative Analysis Course of Study! As you begin this course, you might have questions about how you can use economics, marketing, and quantitative analysis in your role as a manager or leader in an organization. Understanding economics is critical for a business leader. As a leader, you will make economic decisions for the organization, and your organization will be affected by the changes in the external economic environment. Marketing is critical to the success of any organization, whether a for-profit or a nonprofit business. Leaders have to find ways to get their products or services to the customer, and learning marketing concepts will help you understand the role of marketing in the organization. As a manager, you will need to make many decisions, and the concepts that you study in quantitative analysis will help you understand how to use decision-making tools.

**Why economics, marketing, and quantitative analysis?**

Economic activity affects every person and business in the United States. The business cycle goes through periods of growth and recession. In this course of study, you are going to learn why the economy experiences these periods of boom and bust and the impact to households, businesses, and the government when the economic environment changes. Understanding business cycles may help you protect your assets from changes in the economy, and it will help you design business strategies that protect or even benefit your company during changing market conditions.

Economic decisions—what to buy, how much to pay, how much labor to supply, and so on—are constantly made by billions of individuals and companies around the globe. By understanding economics, you will be able to make optimal decisions with respect to resource allocations, cost minimization, and profit maximization.

As you study marketing, you will understand how companies get their products and services to the customer and identify strategies that can maximize a company's profits.

Finally, quantitative analysis provides the tools to analyze information—about customers, competitors, revenues, costs, and much more—and to make optimal decisions about which path a business should follow. Your study of economics, marketing, and quantitative analysis will give you the formal knowledge and tools to enable you to make even better decisions in your personal life and throughout your professional career.

This course of study is designed to prepare you for the ABC3 assessment. The Advanced Business Concepts (ABC3) assessment is a proctored, objective assessment consisting of 72 multiple-choice questions. The exam must be taken at an approved testing site, and the passing score is 52%.

**Competencies**
There are four major academic competencies associated with this course of study:

**Competency: Marketing Goods and Services**  
The student understands concepts and practices associated with marketing goods and services.

**Competency: Macroeconomics**  
The student understands concepts associated with microeconomics and macroeconomics.

**Competency: Microeconomics**  
The student understands concepts associated with microeconomics.

**Competency: Quantitative Methods in Decision Analysis**  
The student understands applications of quantitative methods in decision analysis.

**Required Learning Resources**

**Textbooks:**


**Other Required Resources:**

- Thinkwell: Economics-an online, independent learning resource
- MBA marketing calculations practice problems
- SkillSoft library:
  1. MKT0201: Elements of Marketing Strategy
  2. MKT0243: Pricing and Profitability for Product Managers
  3. STGY0215: Pricing for Profitability
  4. FIN0162: The Ins and Outs of Capital Budgeting
  5. OPER0194: Properties and Applications of Probability Distributions

- Books24x7: Shim, & Siegel. *Budgeting Basics and Beyond* (3rd ed.)
- MBA Primer: includes the following individual courses: managerial economics, financial accounting, business statistics, and finance.

**Preparing for Success**

In order to successfully complete ABC3, you need the appropriate resources to support your learning. The various learning resources included in this course of study are essential to your success, as they will provide the necessary knowledge to complete the required ABC3 activities.

After completing this section, you should have:
• Purchased your textbooks and optional study guide.
• Purchased specific chapters from iChapters.com.
• Logged in to the message board.
• Logged in to SkillSoft.
• Organized your learning environment.
• Prioritized and scheduled your learning activities.

Topics

Acquire Learning Resources

Arrange to obtain or enroll in the learning resources listed in this course of study so there will be no delays in your studies. These items are essential for you, as this course of study will guide you in the use of these resources.

Resources

Order the Textbooks


Note: The WGU bookstore has these books available for immediate purchase and delivery. You may shop at other online bookstores, but be sure to order early and use the correct ISBN to get the correct edition.

Connecting Terms

When learning terms, it is often helpful in connecting the terms to concepts. Think about the terms and concepts listed in each chapter. Prepare a set of review/flash cards, one for each term, on which you identify the term and its definition and provide a short statement of how that term relates to the major concepts presented.

Access the SkillSoft Library

Using Your SkillSoft Account:

The SkillSoft library contains a module that will assist you in preparing for the assessment. As a new student, you are automatically enrolled in SkillSoft during EWB. You will use your original WGU student portal login and password to access SkillSoft at the link above.

Talk to your mentor if you need additional information regarding your SkillSoft account. For additional information on using your SkillSoft account, go to the "Using Your SkillSoft Account" link above and read the information there.

Access the Textbook Companion Websites
URLs:
Economics
Marketing Management
Qualitative Methods for Business
Statistics for Business and Economics

You will find it beneficial to review the definitions, flashcards, crossword puzzles, glossary, and learning objectives found at the above links for their respective textbook chapters.

Enroll in Thinkwell: Economics

You may enroll in this learning resource via your AAP under "Learning Resources" for ABC3. Instructions for accessing the Thinkwell course material will be sent to you via e-mail once the enrollment in this learning resource has been processed. Contact your mentor if you have any questions about this resource.

Logging In to SkillSoft

URL: http://wgu.skillport.com

Log in to SkillSoft. Enter the keywords that you want to find information on in the "Search For" box. Read the SkillSoft Lesson overview. For additional information, review the SkillBriefs, Job Aids, and Books24x7 associated with each module.

Microeconomics

The term "economics" refers to both microeconomics and macroeconomics. Microeconomics is the study of how households and firms make decisions and interact in the marketplace. The concepts used in microeconomics include marginal analysis, supply and demand, costs, market structure, and market competition.

Topics

Concepts of Microeconomics

When you have completed the Concepts of Microeconomics topic, you will be able to:

- Identify how rational and irrational decisions by consumers affect firms.
- Describe the difference between cost and price.
- Show how changes in price and quantity affect the supply and demand.
- Identify forces that can shift supply and demand curves.
- Explain a disequilibrium price.
- Know how price controls are used.
- Calculate demand, income, and cross-price elasticity coefficients.
- Know why elasticity is important.
- Apply the elasticity concept to production and pricing decisions in firms.

Resources

Economics Supplemental Activities
URL:  http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html

Check your understanding of the previous chapters by interacting with each respective chapter at the "Economics" link above.

**Thinkwell: Economics Review**

URL:  http://www.thinkwell.com/account/signin

Review the concepts and terms in the Thinkwell: Economics online course that are related to the content you learned in this section. There are videos, self-tests, and notes that can supplement your study.

**Economics Reading: Understanding Elasticity**

Read chapter 6 ("Elasticity, Consumer Surplus, and Producer Surplus") of your *Economics* textbook.

After reading this chapter, you should be able to answer the following:

- What is price elasticity of demand?
- How can price elasticity of demand be applied?
- How can price elasticity of supply be applied?
- What is cross elasticity of demand and income elasticity of demand?

**Connecting Terms**

Work through your flash cards for the material covered by this topic. If there are concepts that are unclear, review the material in your text or other learning resources, or ask for clarification on the message board or from the course mentor.

**Economics Reading: Understanding Demand and Supply**

Read chapter 3 ("Demand, Supply and Market Equilibrium") of your *Economics* textbook.

After reading this chapter, you should be able to answer the following:

- How do the forces of supply and demand establish the prices and quantities observed in markets for goods and services?
- What does utility theory state?
- How do you derive a demand curve?
- What causes changes in the quantity demanded and the shifts in demand?
- What causes changes in the quantity supplied and the shifts in supply?
- How do you use demand and supply curves to determine surpluses and shortages?

**Message Baord**

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

**Microeconomics of Product Markets**

Why does it matter what is a fixed cost and a marginal cost? How does the type of industry
determine how a firm makes decisions? In this section, you will learn how fixed costs and marginal costs are used to make business decisions. You will learn how the type of industry in which a firm operates influences decision-making. After studying this material, you will be able to decide whether it is cost-effective for your business to offer a new product line or a new service.

**Topics**

**Product Markets**

When you have completed the Product Markets topic, you will be able to:

- Know how fixed cost, marginal cost, and average cost differ.
- Justify a marginal-cost pricing decision.
- Identify how fixed costs are used in pricing decisions.
- Know the marginal cost of production.
- Identify how commodity and monopoly pricing differ.
- Explain how advertising changes the slope and position of the demand curve.
- Explain the characteristics of pure competition, monopolistic competition, oligopoly, monopoly.
- Recognize how the competitive environment affects firm decisions.
- Identify and explain the minimum point on an average cost function.

**Resources**

**Thinkwell: Economics**

**URL:** [http://www.thinkwell.com/account/signin](http://www.thinkwell.com/account/signin)

Review the concepts and terms in the Thinkwell: Economics online course that are related to the content you learned in this topic. There are videos, self-tests, and notes that can supplement your study.

**Message Board**

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

**Economics Supplemental Activities**

**URL:** [http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html](http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html)

Check your understanding of the previous chapters by interacting with each respective chapter at the "Economics" link above.

**Connecting Terms**

Work through your flash cards for the material covered in this week. If there are concepts that are unclear, review the material in your text or other learning resource, or ask for clarification on the message board or from the course mentor.

**Economics Reading: Understanding Pure Competition**

Read chapter 9 ("Pure Competition") of your Economics textbook.

After reading this chapter, you should be able to answer the following:
• What are the names and characteristics of the four basic market models?
• What conditions are required for purely competitive markets?
• Why are the marginal-cost curve and the supply curve for competitive firms identical?
• How does industry entry and exit produce economic efficiency?

Economics Reading: Monopolistic Competition and Oligopoly

Read chapter 11 ("Monopolistic Competition and Oligopoly") of your Economics textbook.

Economics Reading: Understanding the Costs of Production

Read chapter 8 ("The Costs of Production") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

• Why do economic costs include both explicit and implicit costs?
• What is the law of diminishing returns?
• What are the distinctions between fixed and variable costs and among total, average, and marginal costs?

Economics Reading: Pure Monopoly

Read chapter 10 ("Pure Monopoly") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

• What are the characteristics of pure monopoly?
• How does a pure monopoly set its profit-maximizing output and price?
• What are the economic effects of a monopoly?
• Why might a monopolist prefer to charge different prices in different markets?

Antitrust Policy and Regulation

The purpose of antitrust laws and government regulation is to promote competition and to prevent monopolization. In the late 1800s, national markets were created, which led to one or two companies dominating an industry—the railroad is one example. Antitrust laws and regulations were put into place to keep these large-scale dominant sellers from producing less output and charging higher prices. The government wanted to encourage competition. What role should the government play in a free market system? If markets are left unregulated, will optimal outcomes naturally occur? What role does power play in these outcomes?

There will always be a debate regarding these questions, but history is filled with numerous events in which the abuse of power has harmed individuals and other businesses. Are market forces sufficient to control the abuse of power? In this section you will study antitrust policy, industrial regulation, and social regulation. As you study this material, consider how these policies affect your life.

Topics

Antitrust Laws and Regulation

When you have completed the Antitrust Laws and Regulations topic, you will be able to:

• Explain the major antitrust laws in the United States.
• Identify key issues relating to the interpretation and application of antitrust laws.
• Explain how antitrust laws and deregulation are used for controlling monopoly power.

Resources

Economics Reading: Antitrust Policy and Regulation

Read chapter 18 ("Antitrust Policy and Regulation") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

• What are the major antitrust laws in the United States?
• What are the economic principles and difficulties relating to the setting of prices?

Thinkwell: Economics

URL: http://www.thinkwell.com/account/signin

Review the concepts and terms in the Thinkwell: Economics online course that are related to the content you learned in this topic. There are videos, self-tests, and notes that can supplement your study.

Connecting Terms

Work through your flash cards for the material covered in this topic. If there are concepts that are unclear, review the material in your text or other learning resource, or ask for clarification on the message board or from the course mentor.

Congratulations! You have now successfully completed section 1 ("Microeconomics") for the ABC3 course of study. You have mastered the concepts related to marginal analysis, profit maximization, supply, demand, costs, elasticity of demand, elasticity of supply, and market structures.

You can use the concepts you have learned to analyze a wide variety of business situations in marketing, finance, accounting, operations, and other business areas. They will also inform your thinking about a firm's policies and practices. This in turn will make you a better manager and leader in your organization and will help you throughout your career.

Economics Supplemental Activities

URL: http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html

Check your understanding of the previous chapters by interacting with each respective chapter at the Economics link above.

Message Board

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

Economics and Additional Readings: Understanding Commodities

URL: http://en.wikipedia.org/wiki/Commodity

Read chapter 19 ("Agriculture: Economics and Policy") of your Economics textbook, and then review
the information on commodities at the link above.

After reading this chapter and reviewing the website, you should be able to answer the following:

- What are commodities?
- How are commodities priced?
- What are the differences between commodity and monopoly pricing?

Introduction to Macroeconomics

Macroeconomics covers a wide range of topics that are critical to the functioning of the global economy and have a significant impact on business practices and profitability. This section is designed to prepare you for the macroeconomics area of the ABC3 assessment. In macroeconomics, you will study variables such as inflation, unemployment, national income, national expenditures, gross domestic product (GDP), gross national product (GNP), output, consumption, investment, imports, and exports. Macroeconomics also covers the study of government fiscal policy and government monetary policy. These policies include government spending, taxation, and the money supply, including international perspectives. Therefore, macroeconomics is the study of how the economy works as a whole.

Macroeconomics allows you to analyze a wide range of critical issues. When you look at an economy and want to see if that economy is healthy or unhealthy, it is common to look at the total income that the people in that economy receive. Gross domestic product (GDP) is used to measured income. Policy makers use fiscal policy to affect economic outcomes through deliberate changes in government spending and taxes. Changes in spending and taxes contribute to annual deficits (or surpluses), which ultimately impact public debt. The money supply and how the Federal Reserve uses its tools of monetary policy to affect the economy are included in macroeconomics.

The government makes decisions based on the information available in the economy and tries to make the very best decision possible for the country. Your study of macroeconomics will give you the formal knowledge and tools to understand why the government makes such decisions and how those decisions affect the country's macroeconomic variables. This knowledge will help you relate macroeconomic concepts to real-world circumstances throughout your lifetime, and it will help you throughout your professional career.

Topics

Gross Domestic Product (GDP), Growth, and Instability

When you have completed this topic, you will be able to:

- Identify the components of gross domestic product (GDP).
- Define and compute gross domestic product (GDP).
- Discuss the differences between nominal gross domestic product (GDP) and real gross domestic product (GDP).
- Describe how gross national product (GNP) is measured and how it is different from gross domestic product (GDP).
- List the measures of economic growth.
- Describe the key factors that determine the rate of economic growth.
- Show how economic growth affects the labor force participation rate, population, and immigration.
- Explain how labor productivity is tied to economic growth.
- Explain how saving and investment are important for economic growth.
- Describe how human knowledge contributes to economic growth.
Define the business cycle.
Explain what economic indicators are.

Resources

Economics Reading: What is Macroeconomics About?

Read chapter 23 ("Introduction to Macroeconomics") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- How are savings, investment, and consumption related?
- How do markets adjust when shocks arise?
- Are prices sticky? How sticky?

Economics Supplemental Activities

URL: http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html

Check your understanding of the previous chapters by interacting with each respective chapter at the Economics link above.

Thinkwell: Economics

URL: http://www.thinkwell.com/account/signin

Review the concepts and terms in the Thinkwell: Economics online course related to the content you learned in this topic. There are videos, self-tests, and notes that can supplement your study.

Message Board

Visit the message board. Post comments, questions and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

Economics Reading: How do Economies Grow?

Read chapter 25 ("Economic Growth") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What influences growth?
- How do labor and productivity affect growth?
- What role does training and education play?
- How has technology made a difference?
- Is growth always desirable?

Connecting Terms

Work through your flash cards for the material covered in this topic. If there are concepts that are unclear, review the material in your text or other learning resource, or ask for clarification on the message board or from the course mentor.

Economics Reading: How Large is the Economy?
Read chapter 24 ("Measuring Domestic Output and National Income") of your *Economics* textbook.

After reading this chapter, you should be able to answer the following:

- How do you define gross domestic product (GDP), and how do you compute it?
- What does the "balance of payment of a country" mean?
- How do you measure the balance of payment accounts?
- What are the differences between gross domestic product and real gross domestic product?
- What are the differences between nominal gross domestic product and real gross domestic product?
- What does "GNP" stand for? How is it different from gross domestic product (GDP)?

**Economics Reading: What Are Business Cycles, and How Do They Affect Your Job and Wallet?**

Read chapter 26 ("Business Cycles, Unemployment, and Inflation") of your *Economics* textbook.

After reading this chapter, you should be able to answer the following:

- Why do economies go through cycles?
- How is unemployment measured, and what happens to jobs at various phases of the business cycle?
- How is inflation measured, and what happens to prices at various phases of the business cycle?
- Why are some people hurt by while others benefit from inflation?
- Does inflation affect output?

**Macroeconomics, Part 1**

Fiscal policy is used to offset swings of the business cycle. Through direct government intervention in the economy, policy makers attempt to correct an economic upturn that has grown too quickly or an economic downturn that leaves resources idle. By increasing (or decreasing) government spending and/or increasing (or decreasing) taxes, fiscal policy can be used to influence the overall health of the economy.

**Topics**

**Macroeconomic Models and Fiscal Policy**

When you have completed this topic, you will be able to:

- Diagram the circular flow of income and expenditures in macroeconomics.
- Explain how Keynesian theory explains the determination of real income in the short run.
- List the determinants of aggregate demand in the Keynesian model.
- Use the Phillips curve to show the trade-off between unemployment and inflation.

**Resources**

**Economics Reading: How Are Income/Consumption and Income/Savings Related?**

Read chapter 27 ("Basic Macroeconomic Relationships") of your *Economics* textbook.

After reading this chapter, you should be able to answer the following:
What does the term "marginal" mean in relation to consumption? To saving?
How do changes in interest rates affect the economy in terms of savings and investment?
What is the multiplier effect?

Message Board

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

Thinkwell: Economics

URL: http://www.thinkwell.com/account/signin

Review the concepts and terms in the Thinkwell: Economics online course related to the content you learned in this topic. There are videos, self-tests, and notes that can supplement your study.

Connecting Terms

Work through your flash cards for the material covered in this topic. If there are concepts that are unclear, review the material in your text or other learning resource, or ask for clarification on the message board or from the course mentor.

Economics Reading: Can the Government Fix the Economy?

Read chapter 30 ("Fiscal Policy, Deficits, and Debt") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What two "tools" make up the fiscal policy package?
- Who is in charge of creating and implementing changes in fiscal policy?
- Why are changes made, and how would various policy changes affect aggregate demand (AD)? Aggregate supply (AS)?
- How can unemployment be affected? Inflation?
- What are built-in stabilizers, and are they effective?
- Do deficits matter?
- How about the public (national) debt?

Economics Reading: Is There a Simple Model That Explains the Economy?

Read chapter 29 ("Aggregate Demand and Aggregate Supply") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What is aggregate demand? Who are the respective "players"?
- How does aggregate demand react to spending level changes?
- Why is aggregate supply different than aggregate demand?
- When aggregate demand (AD) and aggregate supply (AS) are in equilibrium, what variables are measured on the axis?
- Can these curves shift? Why?
- How do changes in aggregate demand (AD) or aggregate supply (AS) impact the "real economy" (i.e., jobs, prices, output, etc.)?
- What is a shock, and how would a shock be drawn graphically?
Review the concepts and terms about aggregate demand and aggregate supply at the website listed above.

**Economics Reading**

Read chapter 35 ("Extending the Analysis of Aggregate Supply") of your *Economics* textbook.

After reading this chapter, you should be able to answer the following:

- How does the aggregate demand (AD)/aggregate supply (AS) model differ in the long run compared to the short run?
- Does inflation change? How about the business cycle?
- Is there a connection between inflation and unemployment?
- How do aggregate supply (AS) shocks impact the economy in the long run?
- Do tax increases reduce real gross domestic product (GDP)?

**Economics Supplemental Activities**

Check your understanding of the previous chapters by interacting with each respective chapter at the *Economics* link above.

### Macroeconomics, Part 2

Money can be thought of as the oil that keeps the economic engine running smoothly. Businesses and households use money to conduct various transactions. Debts are settled and taxes are paid using currency. The Federal Reserve is tasked with the job of controlling the money supply, thereby protecting the currency from losing value due to inflation. Deflation can also disrupt the economy, so it is important that the money supply also be managed during recessionary times. This week you will learn many important concepts about the role of money, the Federal Reserve, monetary policy, and how different schools of economic thought view expansionary policy.

**Topics**

**Money, Banking, and Monetary Policy**

When you have completed this topic, you will be able to:

- Define the yield curve and understand shifts in the curve.
- Explain the effects of expansionary fiscal policy in the Keynesian model.
- Explain the effects of expansionary monetary policy in the Keynesian model.
- Indicate the differences between monetarism and Keynesian theory.

**Resources**

**Connecting Terms**

Work through your flash cards for the material covered in this topic. If there are concepts that are unclear, review the material in your text or other learning resources, or ask for clarification on the message board or from the course mentor.
Economics Reading: So You Think You Know What Money Is?

Read chapter 31 ("Money and Banking") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What are the functions of money?
- Can the value of your money change?
- Is money worth the paper it is printed on?
- What is the Federal Reserve? What do they do?

Investopedia

URL: http://www.investopedia.com/terms/y/yieldcurve.asp

Define "yield curve" and understand shifts in the curve.

Economics Reading: Money Is Like Magic! It Can Be Created Out of Thin Air!

Read chapter 32 ("Money Creation") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What is fractional reserve system, and why was it adopted?
- How would money creation be affected if there were only one bank?
- What functions do banks perform?
- What is the monetary multiplier?

Economics Reading: Why Do Interest Rates Change? Who Does It?

Read chapter 33 ("Interest Rates and Monetary Policy") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What "tools" make up the monetary policy package?
- Who is in charge of creating and implementing changes in monetary policy?
- Why are changes made, and how would various policy changes affect aggregate demand (AD)? Aggregate supply (AS)?
- How can unemployment be affected? Inflation?
- When would expansionary monetary policy be used? Restrictive monetary policy?

Thinkwell: Economics

URL: http://www.thinkwell.com/account/signin

Review the concepts and terms in the Thinkwell: Economics online course related to the content you learned in this topic. There are videos, self-tests, and notes that can supplement your study.

Message Board

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

Review Concepts and Terms
Review the concepts and terms about the federal open market committee, open market operations, discount rates, and reserve requirements at the website listed above.

Economics Supplemental Activities

URL: http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html

Check your understanding of the previous chapters by interacting with each respective chapter at the Economics link above.

Macroeconomics, Part 3

The United States engages in economic activity with the rest of the world. International trade is very important to consumers and businesses. In this subject, you will learn about topics such as exchange rates, exchange rate systems, the foreign exchange market, the balance of payments, and other international macroeconomic concepts.

Topics

International Economics

When you have completed this topic, you will be able to:

- List all of the accounts in the balance of payment accounts of a country.
- Draw a graph to show the equilibrium of trade balance.
- Define the exchange rate and explain how it is determined.
- List the pros and cons of fixed exchange rates and floating exchange rates.
- Explain how global financial integration affects macroeconomic policymaking.
- Describe why capital mobility increases financial instability in a country.
- Show how multinational economic organizations deal with global financial crises.
- Explain how translation and transaction risk may affect a firm balance sheet and income statement.
- Justify a decision to hedge international risk.
- Explain the various tools for hedging international risk (e.g., currency options, futures, and forward contracts).

Resources

Economics Reading: Want to Trade?

Read chapter 37 ("International Trade") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- Why do economists favor free trade?
- How do supply and demand change when two countries engage in trade?
- Why are trade barriers sometimes used? Who benefits? Who loses?
- Is protectionism sometimes warranted?

Investopedia (1)
Investopedia (2)

**URLs:**
- **Evaluating Country Risk for International Investing**
- **Does International Investing Really Offer Diversification?**

Explain how international translation and transaction risk may affect a firm balance sheet and income statement.

Justify a decision to hedge international risk.

**Economics Supplemental Activities**

**URL:** [http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html](http://highered.mcgraw-hill.com/sites/0073375691/student_view0/index.html)

Check your understanding of the previous chapters by interacting with each respective chapter at the Economics link above.

**Thinkwell: Economics**

**URL:** [http://www.thinkwell.com/account/signin](http://www.thinkwell.com/account/signin)

Review the concepts and terms in the Thinkwell: Economics online course related to the content you learned in this topic. There are videos, self-tests, and notes that can supplement your study.

**Message Board**

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with others is an excellent way to reinforce your own understanding of this material and to connect with others.

**Economics Reading: Going on Vacation? What's Your Dollar Worth Today?**

Read chapter 38 ("Exchange Rates, Balance of Payments, and Trade Deficits") of your Economics textbook.

After reading this chapter, you should be able to answer the following:

- What is the balance of payments?
- What do trade deficits (surpluses) have to do with a nation's currency value?
- How do fixed vs flexible exchange rates differ?
- Why does the Big Mac have anything to do with purchasing power parity?
- Are trade deficits a bad thing? What is recent U.S. history?
- What is a managed float? Why is it currently used?
Investopedia (3)

**URLs:**
- Hedging in Layman’s Terms
  http://www.investopedia.com/articles/optioninvestor/07/hedging-intro.asp
- Practical and Affordable Hedging Strategies
  http://www.investopedia.com/articles/optioninvestor/07/affordable-hedging.asp

Explain the various tools for hedging international risk (e.g., currency options, futures, and forward contracts).

**Concepts and Terms**

**URL:**
http://economics.about.com/od/globalizationtrade/Globalization International Trade Resources.htm

Review the concepts and terms about international trade at the website listed above.

**Connecting Terms**

Work through your flash cards for the material covered in this topic. If there are concepts that are unclear, review the material in your text or other learning resources, or ask for clarification on the message board or from the course mentor.

Congratulations! You have now successfully completed section 2 of economics for the ABC3 course of study. You have mastered concepts related to gross domestic product (GDP), gross national product (GNP), economic fluctuations, unemployment, inflation, money, banking, spending, saving, investment, aggregate demand, aggregate supply, monetary policy, fiscal policy, exchange rates, exchange rate systems, foreign exchange market, balance of payments, and international macroeconomic perspectives.

You can use the concepts you have learned to analyze a wide variety of business situations in international business, finance, accounting, operations, marketing, and other business areas. They will also inform your thinking about firms' practices and government policy. This is turn will make you a better manager and leader in your organization and help you throughout your career.

**Marketing**

The activities for this subject will introduce you to the field of marketing management.

Have you noticed how many types of bottled water are available at your local convenience store? If you were interested in starting a new business with a unique brand of water, what type of research would you have to do before you launched your product? You might want to know how many other brands of water are sold in the geographical area where your brand would be distributed. You might want to know about any government regulations that affect how water is bottled. You would need to find out the best way to get your water to the customer. Which stores would you want to sell your water?

In this section you will study marketing research and strategy. You will learn how companies find data and use that data to design and deliver goods to the marketplace. The success of most companies depends on their ability to market their products to consumers.
Topics

Marketing Strategy and Research

When you complete this topic, you will be able to:

- Explain why marketing is important.
- Define the scope of marketing.
- Explain how marketing management has changed.
- Recognize the difference between a supply chain and a marketing channel.
- Recognize various types of marketing strategies and plans.
- Describe how good marketing research is conducted.
- Recognize the various types of marketing research and when to use them.
- Select an appropriate research approach.
- Identify techniques for forecasting demand.
- Describe customer-perceived value.
- Calculate market share and customer lifetime value.

Chapter 1 of your *Marketing Management* textbook provides an overview of how marketing is an important function within the organization. In chapter 2, marketing strategies and plans are discussed. The impact of marketing strategies and of plans for various levels of the organization on company performance will be evaluated. In chapter 4, the keys to good marketing research are examined. Good marketing research provides companies with information that they need to find customers and compete in the marketplace. There are multiple methods that can be used to gather research data. Effective marketing research is conducted using the scientific method, multiple methods for gathering data, and sound analysis of the data. In chapter 5 you focus on the concept of value, both as what a company offers to its customers and as the value of a customer to the company itself.

Resources

Marketing Management Supplemental Activities (2)

URL: [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 2 ("Developing Marketing Strategies and Plans") of your *Marketing Management* textbook by taking the quiz and interacting with the activities at the *Marketing Management* link above.

SkillSoft Modules

URL: [http://wgu.skillport.com](http://wgu.skillport.com)

Complete the following SkillSoft modules and review the associated SkillBriefs and Job Aids.

- MKT0201: Elements of Marketing Strategy
- STGY0215: Pricing for Profitability

Complete only the following segments:

- Market Share Explained
- Why Market Share Leads to Greater ROI

Marketing Management Reading: Conducting Marketing Research and Forecasting Demand
Read chapter 4 ("Conducting Marketing Research and Forecasting Demand") of your Marketing Management textbook. Pay attention to the following concepts:

- steps in the research planning process
- marketing metrics
- forecasting demand

Marketing Management Supplemental Activities

URL: [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 4 ("Conducting Marketing Research and Forecasting Demand") of your Marketing Management textbook by taking the quiz and interacting with the activities at the Marketing Management link above.

Marketing Management Reading: Creating Customer Value, Satisfaction, and Loyalty

Read chapter 5 ("Creating Customer Value, Satisfaction, and Loyalty") of your Marketing Management textbook. Pay attention to the following concepts:

- customer perceived value
- total quality management
- maximizing customer lifetime value

Marketing Management Reading: Introduction to Marketing

Read chapter 1 ("Defining Marketing for the 21st Century") of your Marketing Management textbook. Pay attention to the following concepts:

- Scope of marketing
- Production concept
- Product concept
- Selling concept
- Marketing concept

Marketing Management Supplemental Activities (1)

URL: [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 1 ("Defining Marketing for the 21st Century") of your Marketing Management textbook by taking the quiz and interacting with the activities at the Marketing Management link above.

Marketing Management Reading: Developing Marketing Strategies and Plans

Read chapter 2 ("Developing Marketing Strategies and Plans") of your Marketing Management textbook. Pay attention to the following concepts:

- How companies develop strategies
- Market objectives
- Business unit planning

Marketing Management Supplemental Activities (3)

URL: [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)
Check your understanding of chapter 5 ("Creating Customer Value, Satisfaction, and Loyalty") of your *Marketing Management* textbook by taking the quiz and interacting with the activities at the *Marketing Management* link above.

**CMBA Marketing Calculations Practice Problems-Section A**

Download the "CMBA Marketing Calculations Practice Problems" document, which is located on the "Learning Resource" tab of your AAP. Complete section A of these practice problems, which covers market share and customer lifetime value. Check your work by comparing your results to the correct answers, which are provided.

**Identifying Markets and Building Brands**

The activities for this subject will introduce you to consumer markets, business markets, market segments and targets, creating brand equity, brand positioning, and the product life cycle.

Do you think that a company has targeted you as a potential customer? If you have gotten credit card applications in the mail, you have been identified as a potential customer for the banking institution or credit card company that sent you the application form. All companies identify their potential customers. This is called “target marketing” and “segmenting the market.” In an effort to be competitive in the marketplace, companies also try to differentiate or brand their products so they are recognizable to the target customer. As a leader or manager in business, you need to understand how companies identify and target potential customers.

**Topics**

**Identifying Markets and Building Strong Brands**

When you complete this topic, you will be able to:

- Compare and contrast consumer markets and business markets.
- Identify the causes of problems encountered by a firm trying to sell to another business.
- Identify the level of segmentation that a company is using.
- Explain why companies select target markets.
- Explain why companies want to create brand equity.
- Understand the differences between consumer marketing and organizational/business marketing.
- Identify the appropriate stage of the product life cycle for a product or service.
- Select an appropriate brand extension strategy based upon the product life cycle stage of a product or service.

If you have no experience with organizational buying, you might think that marketing to organizational buyers works the same way as marketing to consumers. In fact, there are marketing techniques and processes that are unique to organizational buying and selling.

In chapter 6 of your *Marketing Management* textbook, you will become familiar with marketing practices as they relate to consumer markets. Then you can contrast them with them with the organizational marketing techniques you will learn about in chapter 7. In chapter 8 you will learn how companies segment markets and choose target markets on which to spend their marketing efforts, with the goal of reaching the maximum number of lucrative, potential customers. Chapter 9 will help you understand how companies employ marketing techniques to develop value with their brand and gain customer mindshare through effective brand positioning practices. Chapter 10 continues the discussion about how to create branding so that customers will identify your company's products. It also explains the product life cycle and strategies companies can use to
forge success during the different stages of the product’s growth.

**Resources**

**Marketing Management Reading: Analyzing Consumer Markets**

Read chapter 6 ("Analyzing Consumer Markets") of your *Marketing Management* textbook. Pay attention to:

- The factors affecting consumer purchases
- The consumer decision-making process
- The level of customer involvement in decision making

**Marketing Management Reading: Creating Brand Equity**

Read chapter 9 ("Creating Brand Equity") of your *Marketing Management* textbook. Pay attention to the following concepts:

- The role of brands
- Brand element choice criteria
- Devising brand strategy
- Brand extension strategies

**Marketing Management Reading: Crafting the Brand Positioning**

Read chapter 10 ("Crafting the Brand Positioning") of your *Marketing Management* textbook. Pay particular attention to the following concepts:

- Points of parity
- Points of differentiation
- Stages of the product life cycle
- Positioning strategies
- Decision making and market strategy
- Product/service strategy

**Marketing Management Supplement Activities (2)**

**URL:** [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 7 ("Analyzing Business Markets") of your *Marketing Management* textbook by taking the quiz and interacting with the activities at the link above.

**Marketing Management Supplement Activities (3)**

**URL:** [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 8 ("Identifying Market Segments and Targets") of your *Marketing Management* textbook by taking the quiz and interacting with the activities at the link above.

**Marketing Management Supplemental Activities (3)**

**URL:** [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 9 ("Creating Brand Equity") of your *Marketing Management*
textbook by taking the quiz and interacting with the activities at the link above.

**Marketing Management Supplemental Activities (1)**

**URL:** [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 6 ("Analyzing Consumer Markets") of your *Marketing Management* textbook by taking the quiz and interacting with the activities at the link above.

**Marketing Management Reading: Analyzing Business Markets**

Read chapter 7 ("Analyzing Business Markets") of your *Marketing Management* textbook. Pay attention to:

- The participants and stages in the business-buying process

**Marketing Management Reading: Identifying Market Segments and Targets**

Read chapter 8 ("Identifying Market Segments and Targets") of your *Marketing Management* textbook. Pay attention to:

- The role that market characteristics play in selecting the appropriate segmentation scheme and target market identification

**Marketing Management Supplemental Activities**

**URL:** [http://wps.prenhall.com/bp_kotler_mm_12/](http://wps.prenhall.com/bp_kotler_mm_12/)

Check your understanding of chapter 10 ("Crafting the Brand Position") of your *Marketing Management* textbook by taking the quiz and interacting with the activities at the *Marketing Management* link above.

**The Marketing Mix**

The activities for this subject will help you explore important concepts involved in the marketing mix, which focuses on the 4Ps: product, price, place, and promotion. While price will be discussed in the next subject we cover, this subject's material will develop your understanding of designing and managing services (product), developing promotional strategies (promotion), and designing marketing distribution channels (place).

In the current economy, most of the economic growth will occur in the services industry. As a manager, it will be important for you to recognize the uniqueness of marketing services. Along with understanding the role that services play in marketing, there is also a need to understand how to promote your offerings and your organization so that customers can and will buy your goods. Finally, it is not enough to just sell your product or service to a customer; you must also figure out how to get the product to your customer's location or how to connect your customer with your products.

**Topics**

**Marketing Strategies for Products and Services, Promotion, and Place (Distribution)**

When you complete this topic, you will be able to:
• Compare and contrast marketing goods and services.
• Explain how to conduct product-line analysis.
• Describe the risks associated with product-line strategies.
• Select the appropriate marketing strategy for a given situation.
• Define a value chain.
• Explain what a marketing channel is.
• Describe how location is important to a business.
• Describe an appropriate marketing communication strategy to achieve a given promotional objective.

While much of marketing history has been based on tangible goods, service industries are everywhere, and the number of businesses that offer services is increasing. In chapter 12, you will learn about different types of goods, product differentiation, and the techniques for managing product lines. In chapter 13, you will learn about the importance of building a relationship with your customers if you are service provider. You will learn about customer expectations and best practices in service-quality management. In chapter 15, you will explore distribution methods for delivering goods or services to end users by utilizing effective and efficient marketing distribution channels. You will conclude this topic's activities by studying the purpose of promotion strategies and the use of integrated marketing communication to achieve company goals.

Resources

Marketing Management Reading: Designing and Managing Services

Read chapter 13 ("Designing and Managing Services") of your Marketing Management textbook. Pay attention to:

• The distinctive characteristics of services and the differences between how firms market products and services

Marketing Management Reading: Setting Product Strategy

Read chapter 12 ("Setting Product Strategy") of your Marketing Management textbook. Pay attention to the following concepts:

• Product differentiation
• Service differentiation
• Product mix
• Product-line analysis
• Line filling
• Product-mix pricing

Marketing Management Supplemental Activities

URL: http://wps.prenhall.com/bp_kotler_mm_12/

Check your understanding of chapter 12 ("Setting Product Strategy") of your Marketing Management textbook by taking the quiz and interacting with the activities at the link above.

Marketing Management Reading: Designing and Managing Value Networks and Channels

Read chapter 15 ("Designing and Managing Value Networks and Channels") of your Marketing Management textbook. Pay attention to:

• The different types of distribution strategies (direct, intensive, selective, and exclusive).
Marketing Management Supplemental Activities (3)

URL: http://wps.prenhall.com/bp_kotler_mm_12/

Check your understanding of chapter 15 ("Designing and Managing Value Networks and Channels") of your Marketing Management textbook by taking the quiz and interacting with the activities at the link above.

Marketing Management Reading: Designing and Managing Integrated Marketing Communication

Read chapter 17 ("Designing and Managing Integrated Marketing Communication") of your Marketing Management textbook. Pay attention to the following concepts:

- Relationship between marketing communication and brand equity
- Communication process
- Determining communication objectives
- Characteristics of the marketing communication mix

Marketing Management Supplemental Activities (4)

URL: http://wps.prenhall.com/bp_kotler_mm_12/

Check your understanding of chapter 17 ("Designing and Managing Integrated Marketing Communication") of your Marketing Management textbook by taking the quiz and interacting with the activities at the link above.

Marketing Management Supplemental Activities (2)

URL: http://wps.prenhall.com/bp_kotler_mm_12/

Check your understanding of chapter 13 ("Designing and Managing Services") of your Marketing Management textbook by taking the quiz and interacting with the activities at the link above.

Pricing and Marketing Calculations

The activities for this subject will help you understand the varied components involved in determining an appropriate (and profitable) price for products and services. Additionally, you will review key marketing calculations to help you prepare for the assessment.

Price is one of the key components of the marketing mix. Determining an appropriate and profitable price for a good or service requires solid market research, a basic understanding of economics and cost accounting, and some handy calculations. In this subject you will learn about the financial and economic theories that provide the foundation for pricing practices, as well as a variety of formulas to help you determine the most profitable way to set prices. Additionally, these calculations are also valuable for companies to determine the value of pursuing specific marketing strategies.

Topics

Pricing Strategies and Marketing Calculations

When you complete this topic, you will be able to:

- Describe demand elasticity and how it works.
Describe specific pricing objectives and their associated pricing strategies.
Select an appropriate pricing strategy.
Explain how a manufacturer's contribution margin is calculated.
Calculate markup pricing, contribution margin, break-even point, break-even market share, target volume, payback period, and sales force size.

What is the purpose of a marketing channel, and how does the design of the channel affect a firm's ability to sell and transport products? In the future, you may be a logistics manager for your company. As a logistics manager, you will work with the marketing channel to distribute products to customers. In some instances, you will communicate and deliver products directly to the customer. Other companies opt to use personal selling or interactive marketing. You will also learn how both services and products are priced in chapter 14. From setting the price to responding to price changes from competitors, you will learn how companies use pricing to achieve strategic objectives.

Resources

Marketing Management Reading: Developing Pricing Strategies

Read chapter 14 (“Developing Pricing Strategies and Programs”) of your Marketing Management textbook. This chapter contains critical information on pricing strategies and calculations. Take notes as you read this chapter. Pay attention to the following concepts:

- Setting the price
- Pricing objectives
- Selecting a pricing method
- Adapting the price
- Initiating and responding to price changes

Work through all the calculations in this chapter.

Books24x7 Reading

URL: http://wgu.skillport.com

In Books24x7 (available through SkillSoft), locate the book entitled Budgeting Basics and Beyond (3rd edition) by Shim and Siegel. Read and take notes on the following sections:

- Chapter 4
  - Questions Answered by Break-Even and Contribution Margin Analysis
  - Contribution Margin Income Statement (entire screen)
- Chapter 20
  - Payback Period

Marketing Management Reading: Managing Personal Communications

Read chapter 19 (“Managing Personal Communications: Direct Marketing and the Sales Force”) of your Marketing Management textbook.

This chapter contains critical information on direct marketing, interactive marketing, and designing and managing the sales force. Plus, it reveals the method for calculating the size of a sales force.

Marketing Management Supplemental Activities (1)

URL: http://wps.prenhall.com/bp_kotler_mm_12/
Check your understanding of chapter 14 ("Developing Pricing Strategies and Programs") of your Marketing Management textbook by taking the quiz and interacting with the activities at the Marketing Management link above.

SkillSoft Modules

URL: http://wgu.skillport.com

Complete the following SkillSoft module and review the associated SkillBriefs and Job Aids.

- MKT0243: Pricing and Profitability for Product Managers
  - Job Aids
    - Calculating the Contribution Margin Rate
    - Using the Contribution Margin Rate for Other Calculations
- STGY0215: Pricing for Profitability. Complete only the following segments:
  - Supply and Demand
  - Methods and Strategies
- Job Aids and SkillBriefs
  - Break-Even Analysis Formula
  - Three Popular Pricing Strategies
- FIN0162: The Ins and Outs of Capital Budgeting. Complete only the following segment:
  - Calculating Payback Period

Marketing Management Supplemental Activities (2)

URL: http://wps.prenhall.com/bp_kotler_mm_12/

Check your understanding of chapter 19 ("Managing Personal Communications: Direct Marketing and the Sales Force") of your Marketing Management textbook by taking the quiz and interacting with the activities at the Marketing Management link above.

CMBA Marketing Calculations Practice Problems - Sections B, C, D, E, F

Download the "CMBA Marketing Calculations Practice Problems" document, which is located on the "Learning Resource" tab of your AAP. Complete sections B-F of these practice problems, which cover markup, contribution margin, break-even point, target volume, payback period, and sales force size. Check your work by comparing your results to the correct answers, which are provided.

Congratulations! You have successfully completed the marketing section of this course of study. You have learned about how firms market their products to potential customers. You have learned about the four Ps of marketing and how marketing strategy is designed around the four Ps. The next time that you are watching television or reading a magazine, notice the advertisements that companies are using to get their marketing message to you.

Quantitative Methods I

The activities for this subject will introduce you to the concepts associated with quantitative methods.

Have you ever been stuck in line waiting to check out at the supermarket? Have you gone to the department store to buy an item that is on sale only to find that the item is out of stock? In this unit, you will learn about the quantitative methods that companies use to make decisions. The term "decision-making models" refers to quantitative concepts, which include simulation, linear
programming, integer linear programming, inventory models, waiting line models, transportation, assignment, and transshipment problems. You may be familiar with some of these models from your studies in operations management.

**Topics**

**Concepts of Decision-Making Models**

When you have completed this topic, you will be able to:

- Utilize a general understanding of the management science/operations research approach to decision making.
- Realize that quantitative applications begin with a problem situation.
- Understand that managerial problem situations have both quantitative and qualitative considerations that are important in the decision-making process.
- Learn about models in terms of what they are and why they are useful (the emphasis is on mathematical models).
- Identify the step-by-step procedure that is used in most quantitative approaches to decision making.
- Learn about basic models of cost, revenue, and profit and be able to compute the breakeven point.
- Obtain an understanding of the role probability information plays in the decision-making process.
- Understand probability as a numerical measure of the likelihood of occurrence.
- Be able to use the three methods (classical, relative frequency, and subjective) that are commonly used for assigning probabilities and understand when they should be used.
- Understand the concepts of a random variable and a probability distribution.
- Be able to distinguish between discrete and continuous random variables.
- Be able to compute and interpret the expected value, variance, and standard deviation for a discrete random variable.
- Be able to compute probabilities using a binomial probability distribution.
- Understand the difference between how probabilities are computed for discrete and continuous random variables.
- Be able to compute probabilities using a normal probability distribution and understand the role of the standard normal distribution in this process.
- Learn how to describe a problem situation in terms of decisions to be made, chance events, and consequences.
- Be able to analyze a simple decision analysis problem from both a payoff table and decision tree point of view.
- Be able to determine the potential value of additional information.
- Learn how new information and revised probability values can be used in the decision analysis approach to problem solving.
- Understand what a decision strategy is.
- Know what is meant by utility.
- Develop a utility function for money.
- Describe the role a lottery plays in helping a decision maker assign utility values.
- Understand why risk-avoiding and risk-taking decision makers would assign different utility values in the same decision-making situation.
- Know what is meant by a two-person, zero-sum game.
- Identify a mixed strategy and compute optimal probabilities for mixed strategies.

Chapters 1-4 in your *Quantitative Methods for Business* textbook are an introduction to problem solving and decision making. Probability and probability distributions are covered. Random variables are explained in chapter 3. These provide numerical descriptions of the outcomes of experiments. Computations of the expected value, variance, and standard deviation are very
helpful in decision making. Chapter 4 builds on the notion of expected value as it is used in decision analysis when risk and uncertainty are present. Influence diagrams, payoff tables, and decision trees are explored as methods for making optimal decisions. If you have a solid foundation in probability and statistics, you should review chapters 1 through 3 and focus on the content in chapter 4.

Chapter 5 explores game theory, a mathematical application first developed for military applications. Game theory provides an optimal "payoff" when two entities must make a personal best decision (i.e., a strategy), given the fact that their opponent's actions will affect that outcome but not knowing what their opponent will do. Besides military applications, game theory has relevance in police interrogations, gambling, and (as you studied in economics) in decisions made by oligopolists.

Your study of decision-making models will use resources from your textbook, websites, and the message board. Be sure to utilize each of these resources, as they provide a broad range of viewpoints on the topics you will need to master in order to pass the ABC3 objective assessment.

Resources

**Quantitative Methods for Business Reading: Understanding Quantitative Analysis**

Read chapter 1 ("Introduction") of your *Quantitative Methods for Business* textbook.

After reading this chapter, you should be able to answer the following:

- What role does decision making play in the management science/operations research approach?
- How are both quantitative and qualitative considerations important in the decision-making process?
- What are decision-making models, and why are they useful? Why is there an emphasis on mathematical models?
- How do you use quantitative approaches to decision making?
- How do you calculate the break-even point by using basic models of cost, revenue, and profit?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 1. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to the introduction to quantitative analysis.

**Check Your Understanding of Quantitative Analysis:** Complete the following activity to check your understanding of quantitative analysis:

- Go back and review the concepts in the chapter as needed.

**Quantitative Methods for Business Reading: Understanding Probability Distributions**

Read chapter 3 ("Probability Distributions") of your *Quantitative Methods for Business* textbook.

After reading this chapter, you should be able to answer the following:

- How does probability information play a role in the decision-making process?
- What does "probability" mean?
- How do you use the three methods (classical, relative frequency, and subjective) to assign probabilities? When should you use each of these methods?
- What are the concepts of a random variable and a probability distribution?
What are the differences between discrete and continuous random variables?
How do you calculate and interpret the expected value, variance, and standard deviation for a discrete random variable?
How do you compute probabilities using a binomial probability distribution?
What is the standard normal distribution? How do you use it to calculate probabilities?
What roles do probability distributions and random numbers play in implementing simulation models?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 3. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to probability distributions.

Check Your Understanding of Probability Distributions: Complete the following activities to check your understanding of probability distributions:

- At the end of Chapter 3, work all the problems that address figuring out a probability for a situation with normal distribution (mean and standard deviation given) and a value.
- Go back and review the concepts in the chapter as needed.

SkillSoft

URL: http://wgu.skillport.com

Complete the following SkillSoft module and review the associated SkillBriefs and Job Aids:

- OPER0194: Properties and Applications of Probability Distributions

Quantitative Methods for Business Reading: Understanding Utility and Game Theory

Read chapter 5 ("Utility and Game Theory") of your Quantitative Methods for Business textbook.

After reading this chapter, you should be able to answer the following:

- What does "utility" mean?
- How do you develop a utility function for money?
- How does a decision maker assign utility values for a lottery?
- Why do a risk taker and a risk avoider assign different utility values in the same decision-making situation?
- What is a two-person, zero-sum game?
- How do you identify a mixed strategy and compute optimal probabilities for mixed strategies?
- What is a simulation, and how does it aid in the analysis of a problem?
- Why is simulation a significant problem-solving tool?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 5. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to utility and game theory.

Check Your Understanding of Utility, Game Theory, and Simulation: Complete the following activities to check your understanding of utility, game theory, and simulation:

- Identify those situations in which simulation would be a viable approach.
- Using simulation output, determine the course of action for two alternatives with means that are not significantly different.
Identify the important role probability distributions and random numbers play in implementing simulation models.

Apply the concepts of a discrete random variable and a probability distribution to simulation.

Develop a discrete probability distribution based on a given simulation.

Go back and review concepts in the chapter as needed.

Message Board

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with other students is an excellent way to reinforce your own understanding of this material and to connect with others. You can also start your own thread and ask any questions you have about topics you are interested in.

Quantitative Methods for Business Reading: Introduction to Probability

Read chapter 2 ("Introduction to Probability") of your Quantitative Methods for Business textbook.

After reading this chapter, you should be able to answer the following:

- How does probability information play a role in the decision-making process?
- What does "probability" mean?
- How do you use the three methods (classical, relative frequency, and subjective) to assign probabilities? When should you use each of these methods?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 2. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to the introduction to probability.

Check Your Understanding of Probability: Complete the following activities to check your understanding of probability:

- Go to the problems at the end of the chapter 2 and work all the problems that deal with probabilities.
- Go back and review concepts in the chapter as needed.

Supplemental Activities

Use this website for the content and activities related to the chapters you read for this topic in your Qualitative Methods for Business textbook.

Quantitative Methods for Business Reading: Understanding Decision Analysis

Read chapter 4 ("Decision Analysis") of your Quantitative Methods for Business textbook.

After reading the chapter, you should be able to answer the following:

- How can you describe a problem situation in terms of decisions to be made, chance events, and consequences?
- How do you analyze a simple decision analysis problem from both a payoff table and a decision tree point of view?
- What is the potential value of additional information?
- How can new information and revised probability values be used in the decision-analysis approach to problem solving?
- What is a decision strategy?
Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 4. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to decision analysis.

Check Your Understanding of Decision Analysis: Complete the following activities to check your understanding of decision analysis:

- List some ways in which you might apply probability and probability distributions to decision making in management.
- Go back and review the concepts in the course as needed.

MBA Primer

Review the Business Statistics Course in the MBA Primer online resources website.

Quantitative Methods II

The activities for this subject will introduce you to the concepts associated with forecasting and linear programming.

Forecasting is a decision tool used to identify trends and cyclical components in data. Forecasts are often based on either simple linear regression or multiple regression analysis methods. The Delphi forecasting technique is another option for analysis. Linear programming is an optimization tool that describes the best solution to a particular situation, given a number of constraints that may occur. Typically, linear programming is used to obtain an optimal outcome (such as minimizing costs or maximizing profit) given certain constraints. Transportation, assignment, and transshipment problems provide a specific instance in which linear programming models may be used in the decision-making process of the real world.

Topics

Concepts of Forecasting and Linear Programming

When you have completed this topic, you will be able to:

- Know the various components of a time series.
- Be able to use smoothing techniques, such as moving averages and exponential smoothing.
- Be able to use the least squares method to identify the trend component of a time series.
- Understand how the classical time series model can be used to explain the pattern or behavior of the data in a time series and to develop a forecast for the time series.
- Be able to determine and use seasonal indexes for a time series.
- Know how regression models can be used in forecasting.
- Learn how to develop linear programming models for simple problems.
- Be able to identify the special features of a model that make it a linear programming model.
- Learn how to solve two variable linear programming models by the graphical solution procedure.
- Understand the importance of extreme points in obtaining the optimal solution.
- Become familiar with the types of problems that can be solved by applying a transportation model.
- Be able to develop network and linear programming models of the transportation problem.
- Become familiar with the types of problems that can be solved by applying an assignment model.
- Be able to develop network and linear programming models of the assignment problem.
Linear programming is one of the most important tools for analyzing problems such as transportation, assignment, and transshipment problems. Linear programming allows the manager to solve for a constrained maximum, which is the optimal action given the constraints which exist in the situation.

Your study of forecasting and linear programming will use resources from your textbook, websites, and the message board. Be sure to utilize each of these resources, as they provide a broad range of viewpoints on the topics you will need to master in order to pass the ABC3 objective assessment.

Resources

Quantitative Methods for Business Reading: Understanding Transportation, Assignment, and Transshipment Problems

Read chapter 10 ("Transportation, Assignment, and Transshipment Problems") of your Quantitative Methods for Business textbook.

After reading this chapter, you should be able to answer the following:

- What are the special features of the transportation, assignment, and transshipment problem?
- How do you develop network and linear programming models of the transportation, assignment, and transshipment problem?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 10. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to transportation, assignment, and transshipment problems.

Check Your Understanding of Transportation, Assignment, and Transshipment Problems. Complete the following activities to check your understanding of transportation, assignment, and transshipment:

- Go back and review the concepts in the chapter as needed.

Supplemental Activities

Use this website for the content and activities related to the chapters you read for this topic in your Qualitative Methods for Business textbook.

Message Board

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with other students is an excellent way to reinforce your own understanding of this material and to connect with others. You can also start your own thread and ask any questions you have about topics you are interested in.

Quantitative Methods for Business Reading: Understanding Forecasting

Read chapter 6 ("Forecasting") of your Quantitative Methods for Business textbook.

After reading this chapter, you should be able to answer the following:

- What are the various components of a time series?
- What are smoothing techniques, such as moving averages and exponential smoothing? How do you use them?
• How do you use the least-squares method to identify the trend component of a time series?
• How do you use the classical time series model to explain the pattern or behavior of data in a time series and to develop a forecast for the time series?
• What are seasonal indexes for a time series?
• How do you use regression models in forecasting?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 6. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to forecasting.

**Check Your Understanding of Forecasting:** Complete the following activities to check your understanding of forecasting:

• Calculate a moving average using monthly data using the problems at the end of the chapter.
• Write a paragraph to show an understanding of how to generate a forecast with data that exhibits a long-term trend and seasonal variation.
• Use smoothing techniques, such as moving averages and exponential smoothing.
• Determine and use seasonal indexes for a time series.
• Go back and review the concepts in the chapter as needed.

**Quantitative Methods for Business Reading: Introduction to Linear Programming**

Read chapter 7 ("Introduction to Linear Programming") of your *Quantitative Methods for Business* textbook.

After reading this chapter, you should be able to answer the following:

• How can you develop linear programming models for simple problems?
• How do you solve two variable linear programming models by the graphical solution procedure?
• What are extreme points, and why are they important?
• What are alternative optimal solutions, infeasibility, and unboundedness in linear programming problems?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 7. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to linear programming.

**Check Your Understanding of Linear Programming:** Complete the following activities to check your understanding of linear programming:

• Using the problems at the end of the chapter, write the objective function for the appropriate linear programming model.
• Using the problems at the end of the chapter, write a constraint for the appropriate linear programming model including using right-hand side (RHS) variables and coefficients.
• Using the problems at the end of the chapter, determine the most critical resource to relieve based on linear programming output.
• Using the problems at the end of the chapter, determine the managerial interpretations of slope and intercept coefficients.
• Define the objective function.
• Describe the kinds of problems linear programming can be used to solve.
• Develop linear programming models for simple problems.
• Explain the importance of constraints in obtaining the optimal solution, and use them to solve
minimization problems and maximization problems.
  - Go back and review concepts in the chapter as needed.

Quantitative Methods III

The activities for this subject will introduce you to the concepts associated with statistics.

In today's global business and economic environment, managers can access vast amounts of information. The most successful managers and decision makers use statistics to understand information and use it effectively. Statistics impact marketing, finance, operations, accounting, and all other areas of business. For example, statistical quality control helps manufacturers and service operations improve quality and maximize customer satisfaction. Financial managers use statistics frequently to assess variation and risk. In short, statistics is fundamental to modern business management and decision making.

Topics

Concepts of Statistics

When you have completed this topic, you will be able to:

- Construct and interpret tabular summarization procedures for quantitative data, such as frequency and relative frequency distributions and cumulative frequency and cumulative relative frequency distributions.
- Be able to compute the mean, median, mode, variance, standard deviation, and coefficient of variation.
- Understand how Z-scores are computed and how they are used as a measure of the relative location of a data value.
- Be able to compute and interpret correlations as measures of association between two variables.
- Obtain an appreciation of the role probability information plays in the decision-making process.
- Understand probability as a numerical measure of the likelihood of occurrence.
- Know how to use the laws that are available for computing the probabilities of events.
- Understand the concepts of a random variable and a probability distribution.
- Be able to compute and interpret the expected value, variance, and standard deviation for a discrete random variable.
- Be able to compute and work with probabilities involving binomial probability distributions.
- Understand the difference between how probabilities are computed for discrete and continuous random variables.
- Be able to compute probabilities using a normal probability distribution and understand the role of the standard normal distribution in this process.
- Know what simple random sampling is and how simple random samples are selected.
- Understand the concept of a sampling distribution.
- Know the specific characteristics (the expected value and standard error) of the sampling distribution for the sample mean.
- Know how to construct and interpret an interval estimate of a population mean.
- Know the definition of confidence interval, confidence coefficient, and confidence level.
- Understand the use of the F-distribution in performing an analysis of variance procedure.
- Know how to set up an ANOVA table and interpret the entries in the table.
- Understand how regression analysis can be used to develop an equation that estimates mathematically how two variables are related.
- Know how to fit a regression equation to a set of sample data based upon the least-squares method.
- Be able to determine how good a fit is provided by the estimated regression equation and
compute the sample correlation coefficient from the regression analysis output.

- Learn how to use a residual plot to make a judgment as to the validity of the regression assumptions.

Chapters 2 and 3 of your *Statistics for Business and Economics* textbook introduce descriptive statistics, including the mean, median, mode, variance, and standard deviation. Chapters 4 through 7 cover probability, the concept of a probability distribution, and sampling distributions. Chapter 8 discusses confidence intervals, which lay the groundwork to calculate statistical significance. This is followed by the techniques of ANOVA and simple regression in chapters 13 and 14, respectively.

Your study of statistics will use resources from your textbook, websites, and the message board. Be sure to utilize each of these resources, as they provide a broad range of viewpoints on the topics you will need to master in order to pass the ABC3 objective assessment.

**Resources**

**Statistics for Business and Economics Reading: Understanding Descriptive Statistics**

*Part 1*


After reading this chapter, you should be able to answer the following:

- What are frequency, relative frequency, and cumulative frequency?
- How do you construct and interpret tabular summarization procedures for quantitative data?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 2. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to descriptive statistics.

**Check Your Understanding of Descriptive Statistics:** Complete the following activities to check your understanding of descriptive statistics:

- Complete all of the self-test questions in chapter 2, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

**Statistics for Business and Economics Reading: Understanding Continuous Probability Distributions**

Read chapter 6 ("Continuous Probability Distributions") of your *Statistics for Business and Economics* textbook.

After reading this chapter, you should be able to answer the following:

- How are probabilities computed for discrete and continuous random variables?
- How do you compute probabilities using a normal probability distribution? When do you use the standard normal distribution?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 6. Prepare a set of review/flash cards, one for
each term, and on them identify the term, its definition, and a short statement of how that term relates to continuous probability distributions.

**Check Your Understanding of Continuous Probability Distributions:** Complete the following activities to check your understanding of continuous probability distributions:

- Complete all of the self-test questions in chapter 6, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

**Statistics for Business and Economics Reading: Understanding Interval Estimation**

Read chapter 8 ("Interval Estimation") of your *Statistics for Business and Economics* textbook.

After reading this chapter, you should be able to answer the following:

- How do you construct and interpret a confidence interval for the population mean?
- How do you utilize the confidence coefficient and confidence level to find a confidence interval?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 8. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to interval estimation.

**Check Your Understanding of Interval Estimation:** Complete the following activities to check your understanding of interval estimation:

- Suppose you have two small data sets consisting of five numbers each. Both data sets have the same average, but one has a larger standard deviation. How does the larger standard deviation affect the confidence that managers should place on inferences drawn from the second data set as compared to the first?
- Explain the difference between the standard deviation and the standard error?
- Complete all problems at the end of the chapter that require calculation of a 95% confidence interval for the population average for a given sample size, average and standard deviation. Using data provided in the chapter, convert a confidence level into a Z-value.
- Complete all of the self-test questions in chapter 8, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

**Statistics for Business and Economics Reading: Introduction to Probability**

Read chapter 4 ("Introduction to Probability") of your *Statistics for Business and Economics* textbook.

After reading this chapter, you should be able to answer the following:

- What role does probability information play in the decision-making process?
- What does "probability" mean?
- What are the rules describing the probabilities of events?
Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 4. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to probability.

Check Your Understanding of Probability: Complete the following activities to check your understanding of probability:

- Complete all of the self-test questions in chapter 4, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

Statistics for Business and Economics Reading: Understanding Experimental Design and Analysis of Variance

Read chapter 13 ("Experimental Design and Analysis of Variance") of your Statistics for Business and Economics textbook.

After reading this chapter, you should be able to answer the following:

- What are the assumptions necessary to use an ANOVA procedure?
- How do you use the F-distribution in performing an ANOVA procedure?
- How do you interpret an ANOVA table?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 13. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to experimental design and analysis of variance.

Check Your Understanding of Experimental Design and Analysis of Variance: Complete the following activities to check your understanding of experimental design and analysis of variance:

- Complete all of the self-test questions in chapter 13, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

Message Board

Visit the message board. Post comments, questions, and helpful learning hints. Read and respond to the posts made by your fellow learners. Interacting with other students is an excellent way to reinforce your own understanding of this material and to connect with others. You can also start your own thread and ask any questions you have about topics you are interested in.

Statistics for Business and Economics Reading: Understanding Descriptive Statistics Part 2


After reading this chapter, you should be able to answer the following:
What is the purpose of using variability measures?

How do you compute Z-scores? How are they used to measure the relative location of a data value?

How do you interpret covariance and correlation as measures of association between two variables?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 3. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to descriptive statistics.

Check Your Understanding of Descriptive Statistics: Complete the following activities to check your understanding of descriptive statistics:

- Complete all of the self-test questions in chapter 3, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

Statistics for Business and Economics Reading: Understanding Sampling and Sampling Distributions

Read chapter 7 ("Sampling and Sampling Distributions") of your Statistics for Business and Economics textbook.

After reading this chapter, you should be able to answer the following:

- What is a random sample?
- What is a sampling distribution?
- What are the expected value and standard error of the sampling distribution for the sample mean and sample proportion?
- What is the central limit theorem, and how does it influence the shape of the sampling distribution?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 7. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to sampling and sampling distributions.

Check Your Understanding of Sampling and Sampling Distributions: Complete the following activities to check your understanding of sampling and sampling distributions:

- Work the problems at the end of the chapter that require you to identify the probability of a specified event using a historical data distribution.
- Work the problems at the end of the chapter that address calculating the probability of a specified event with a normal distribution (mean and standard deviation given) and a value. Work the problems at the end of the chapter that address calculating the value that corresponds to the specified probability when there is a normal distribution (mean and standard deviation given) and a probability, calculate the value that corresponds to the specified probability.
- Use the Z-formula to find the probability of a value given the mean and standard deviation of a random variable.
- Complete all of the self-test questions in chapter 7, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the
relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

**Statistics for Business and Economics Reading: Understanding Simple Linear Regression**

Read chapter 14 ("Simple Linear Regression") of your *Statistics for Business and Economics* textbook.

After reading this chapter, you should be able to answer the following:

- How do you develop simple linear regression equations from sample data and interpret the slope and intercept?
- How do you interpret the meaning of the correlation coefficient?
- How can you use regression analysis to develop an equation that describes how two variables are related?
- What are the differences between the regression model, the regression equation, and the estimated regression equation?
- What is the least-squares method?
- How do you compute the sample correlation coefficient from the regression analysis output?
- How do you interpret a scatter plot of the residuals from a regression?

**Connecting Terms:** When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 14. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to simple linear regression.

**Check Your Understanding of Simple Linear Regression:** Complete the following activities to check your understanding of simple linear regression:

- Using regression output, determine how much a coefficient might vary.
- Using regression output, and values for the independent variables, predict the range of a value.
- Using regression output, determine the significant coefficients.
- Using regression output, determine the managerial interpretation of the coefficients.
- Using regression output, explain the managerial implications of a dummy variable.
- Using data in the chapter that includes three groups with their averages, sample sizes, and standard deviations, along with the p-value of an ANOVA, determine if the group means are statistically significantly different.
- Interpret the output summary (i.e., ANOVA, R2, R2 adjusted, p-values, F-test, coefficients, and correlations) from a regression.
- Complete all of the self-test questions in chapter 14, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using Appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

**Books24x7**

**URL:** [http://wgu.skillport.com](http://wgu.skillport.com)

In Books24x7 (available through [SkillSoft](http://wgu.skillport.com)), locate the book entitled *Budgeting Basics and Beyond* (3rd edition) by Shim and Siegel. Read and take notes on chapter 16 ("Regression Analysis: Popular Sales Forecast System").
Statistics for Business and Economics Reading: Understanding Discrete Probability Distributions

Read chapter 5 ("Discrete Probability Distributions") of your Statistics for Business and Economics textbook.

After reading this chapter, you should be able to answer the following:

- What are the concepts of a random variable and a probability distribution?
- How do you compute and interpret the expected value, variance, and standard deviation of a discrete random variable.
- How do you calculate probabilities involving a binomial probability distribution?

Connecting Terms: When learning terms, it is often helpful to connect the term to the concept. Think about the glossary listed at the end of chapter 5. Prepare a set of review/flash cards, one for each term, and on them identify the term, its definition, and a short statement of how that term relates to discrete probability distributions.

Check Your Understanding of Discrete Probability Distributions: Complete the following activities to check your understanding of discrete probability distributions:

- Using the practice problems at the end of the chapter, calculate the expected value for outcomes with known probabilities.
- Complete all of the self-test questions in chapter 5, and check your answers using appendix D at the end of the text. If you need or want additional practice with a topic, complete the relevant even-numbered questions and check your answers using appendix D at the end of the text.
- Go back and review the concepts in the chapter as needed.

Conclusion

Congratulations! You have completed a rigorous course of study. Mastering concepts in three subject areas like economics, marketing, and quantitative analysis is not easy. The new skills you have learned will help you reach your goal of being a successful leader in a business or nonprofit organization. As you completed this course of study, you learned new skills that will be help you become a leader in business.

Topics

Review of Major Points

During this Course of Study, you have studied economics, marketing, and quantitative analysis. In economics, you learned microeconomic concepts like marginal analysis, supply and demand, costs, market structure, and market competition. As you review for the ABC3 objective assessment, be sure to review these concepts. You also mastered macroeconomic concepts around inflation, unemployment, national income, national expenditures, gross domestic product (GDP), gross national product (GNP), output, consumption, investment, imports, and exports. As you review, remember that macroeconomics looks at the big picture and microeconomics addresses individual or consumer economics.

In the marketing section, you learned about price, product, place, and promotion. You learned how organizations develop marketing plans and marketing strategies. You learned how the stage of the life cycle affects marketing strategy. As you prepare for the ABC3 objective assessment, you should review all these concepts, paying particular attention to chapter on pricing. It is critical that you
understand and can work the calculations explained in the pricing chapter.

Your skills in quantitative analysis will help you analyze and understand a tremendous range of information in marketing, finance, accounting, operations, and other business areas. This in turn will help you better understand and serve customers, develop new products, address competitive threats, manage revenues and costs, and much more.

Transfer/Application

Once you complete this course of study, you will have demonstrated a level of competence that you can immediately use in your work and career. Moreover, your knowledge of this course will give you a leg up on many of your colleagues who have not mastered these sophisticated areas.

The Advanced Business Concepts: Economics, Marketing, and Quantitative Analysis assessment is one of the last assessments in your MBA program. The concepts mastered in this course of study are just a beginning. As a future leader in business and industry, your goal should be to build on the skills that you have developed as part of this course of study. Business leaders are constantly evaluating the economic environment to avoid risk and take advantage of opportunities. Business leaders are also continually looking to develop new markets for products and services. Strong decision-making skills are critical to your success as a business leader, and the quantitative analysis concepts that you mastered will provide a basis for decision making. As you begin to think about your professional career post-MBA, it is important that you continue to develop your knowledge of concepts in economics, marketing, and qualitative analysis. The material that you have studied in the ABC3 course of study is a foundation for you to build on in the future.

Feedback

To provide feedback on this or any other course of study, please use the Course of Study Feedback form.

ADA Requirements

Please review the University ADA policy.