

McConnell

Brue

Economics

Principles, Problems, and Policies

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To Mem and to Terri and Craig



ECONOMICS: PRINCIPLES, PROBLEMS, AND POLICIES

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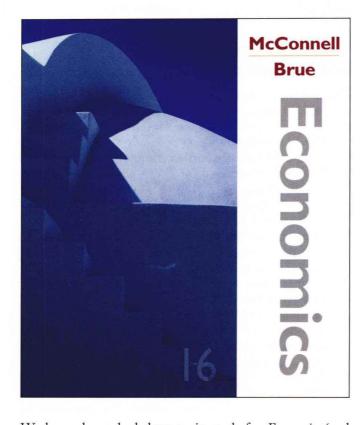
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Campbell R. McConnell earned his Ph.D. from the University of Iowa after receiving degrees from Cornell College and the University of Illinois. He taught at the University of Nebraska-Lincoln from 1953 until his retirement in 1990. He is also coauthor of Contemporary Labor Economics, sixth edition (McGraw-Hill/Irwin), and has edited readers for the principles and labor economics courses. He is a recipient of both the University of Nebraska Distinguished Teaching Award and the James A. Lake Academic Freedom Award and is past president of the Midwest Economics Association. Professor McConnell was awarded an honorary Doctor of Laws degree from Cornell College in 1973 and received its Distinguished Achievement Award in 1994. His primary areas of interest are labor economics and economic education. He has an extensive collection of jazz recordings and enjoys reading jazz history.

Stanley L. Brue did his undergraduate work at Augustana College (South Dakota) and received its Distinguished Achievement Award in 1991. He received his Ph.D. from the University of Nebraska-Lincoln. He is a professor at Pacific Lutheran University, where he has been honored as a recipient of the Burlington Northern Faculty Achievement Award. Professor Brue has also received the national Leavey Award for excellence in economic education. He has served as national president and chair of the Board of Trustees of Omicron Delta Epsilon International Economics Honorary. He is coauthor of Economic Scenes, fifth edition (Prentice-Hall), and Contemporary Labor Economics, sixth edition (McGraw-Hill/Irwin), and author of The Evolution of Economic Thought, sixth edition (South-Western). For relaxation, he enjoys international travel, attending sporting events, and skiing with family and friends.



We have always had three main goals for *Economics* (and its companion editions, Macroeconomics and Microeconomics), the nation's best-selling textbook. Those goals remain and are spelled out under "Fundamental Objectives" below, but the sixteenth edition embodies a new and exciting development that deserves your earliest attention: The sixteenth edition is accompanied by and integrated with a phenomenal new enhancement, DiscoverEcon* with Paul Solman Videos, that brings to economics education an entirely new level of excellence and excitement not possible in earlier editions. This new program, which consists of video tutorials by Paul Solman, the noted Economics Correspondent (Public Television), interactive exercises, and testing (supported by a powerful classroom management system allowing the reporting of results by students to instructors), promises to set a new standard in the ease and excellence of economics instruction.

Our users have always known those things that a book does best. And the sixteenth edition recognizes that

*Developed by Gerald Nelson at the University of Illinois, Urbana-Champaign.

principle. DiscoverEcon with Paul Solman Videos is not a book replacement program. It is an exciting extension of this edition that will allow students to hear real lectures on key concepts anywhere and anytime they have access to a computer. Those same students will be able to build and practice economic skills, and report the results to their instructors online. The method for this has been kept simple while the message has been kept foremost. Economics matters.

We are particularly pleased that recent editions have gained market share in the face of formidable new entries. An estimated 13 million students worldwide have now used this book. *Economics* has been adapted into Australian and Canadian editions and translated into Italian, Russian, Chinese, French, Spanish, Portuguese, and other languages. It continues to be used in Russia and other Russian-speaking countries.

Fundamental Objectives

We have three main goals for *Economics*:

- Help the beginning student master the principles essential for understanding the economizing problem, specific economic issues, and the policy alternatives.
- Help the student understand and apply the economic perspective and reason accurately and objectively about economic matters.



Web link: www.mcconnell16.com/discoverecon

Promote a lasting student interest in economics and the economy.

What's New and Improved?

One of the benefits of writing a text that has met the market test is the opportunity to revise—to delete the outdated and install the new, to rewrite misleading or ambiguous statements, to introduce more relevant illustrations, to improve the organizational structure, and to enhance the learning aids. A chapter-by-chapter list of changes is available at our website, www.mcconnell16.com. The more significant changes include the following.

Two-Path Macro

We have extensively reorganized and revised Chapters 9, 10, and 11 to provide two alternative paths through the macro. We know that nearly all instructors like to cover somewhere in their macro course the basic relationships between income and consumption, the real interest rate and investment, and changes in spending and changes in output (the multiplier, conceptually presented). So now all these topics are found in Chapter 9, "Basic Macroeconomic Relationships." The instructor can then proceed from Chapter 9 directly to either Chapter 10 "The Aggregate Expenditures Model" or Chapter 11, "Aggregate Demand and Aggregate Supply." This organization is logical and allows those instructors who prefer not to teach the equilibrium AE model to skip it without

loss of continuity. As before, the remainder of the macro is AD-AS based.



Winfrey, and Rodriguez make good choices Vinfrey, and Rodriguez make good choices.

Deciding to go to college involves weight

of stellar Zakini Getry Image

future benefits and present costs. The

future benefits are higher expected-lifetime

earnings. The present costs include direct costs, such as tuition and books

and the indirect cost for epoperunity costs of foreigning income that could

be earned as a full-time worker with a high school diploma. Students at:

tend college because they expect the long-run benefits of a degree to exceed the short-term costs.

Unlike most students, Gates faced huge opportunity costs for stay

Unlike most students, Cates faced ruge opportunity costs for stay-ing in college. He had a vision for his company, and starring work young helped ensure Microsoft's success. Similarly, Winfrey landed a spot in local television news when she was a teenage, eventually pro-ducing and starring in the Opinit Winfrey Show when she was 32 years ducing and starring in the Opinit Winfrey Show when she was 32 years of successes that made her famous talk show possible. And Rodrigues have professional subhear how short creater. Therefore, axion knew that professional athletes have short careers. Therefore, going to college directly after high school would have taken away four years of his peak earning potential.

So Gates, Winfrey, and Rodriguez understood opportunity costs

and made good choices. But it's important to note that their experiences are not typical. College graduates usually earn about 50 percent more during their lifetimes than persons with just high school diplo mas. For most students, "Go to college, stay in college, and earn

Winfrey eventually went back to school and earned a degree from Tensitate University when she was in her thirties.

Consider This **Vignettes**

New to the book are 32 analogies, examples, or stories that help drive home central economic ideas in a student-oriented, realworld manner. For instance, the idea of trade secrets is described with the story of "catgut" and violin strings, while the income of street entertainers is shown to suffer from the fact that they provide a type of public good. These brief vignettes, each accompanied by a photo, illustrate key points in a lively, colorful, and easy-to-remember way.

Contemporary Discussions and Examples

The sixteenth edition contains discussions of many new or extended topics. Here are a few:

- The economics of the war on terrorism
- China's rapidly emerging economy
- Corporate financial and accounting misconduct
- Explosion of demand for DVD players, DVDs, and digital cameras
- New marginal income tax brackets
- Expansion of the European Union
- Consumption impacts of mortgage refinancing
- The recession of 2001 and the sluggish recovery of 2002 and early 2003
- Bush tax cuts, expansionary fiscal policy, and soaring Federal budget deficits
- Fed-engineered interest-rate cuts
- The debate over artful monetary management versus inflation targeting
- The continuing productivity surge
- Minimum efficient scale applications (commercial aircraft versus redi-mix concrete plants)
- Effects of rising insurance costs on the cost curves of individual firms
- Strategic behavior as an entry barrier
- The 10 most rapidly expanding, and the 10 most rapidly declining, U.S. occupations
- Diverging profit paths of Wal-Mart and Kmart
- Global warming issues
- Alternative antitrust philosophies
- The Microsoft antitrust case
- Subsidies under the Farm Act of 2002
- The Gini ratio as a measure of income inequality
- Prescription drug coverage and other health care issues
- Large U.S. trade deficits

Revised Demand and Supply Chapter and Elasticity Chapter

We have moved the discussion of price floors and price ceilings in Chapter 20 of the previous edition to Chapter 3 on demand and supply. Chapter 20 ("Elasticity of Demand and Supply") now has a tighter focus and also has room for new elasticity-of-supply applications that relate to antiques versus reproductions and to the volatile price of gold.

Three Bonus Web Chapters, Including a Second Supply and Demand Chapter

Three chapters are available for free use at our website, www.mcconnell16.com. The first of these, "Applications and Extensions of Supply and Demand Analysis" (3Web), is entirely new and provides real-world examples of changes in supply and demand, shortages and surpluses arising from preset prices, and overconsumption of nonpriced goods (or resources). For instructors who want to extend the supply and demand analysis of Chapter 3, this chapter also explains consumer surplus, producer surplus, and efficiency losses. The other two web chapters, "The Economics of Developing Countries" (39Web) and "Transition Economies: Russia and China" (40Web), are also available for instructors and students who have a special interest in those topics. The three web chapters have the same design, color, and features as regular book chapters, are readable in Adobe Acrobat format, and can be printed if desired. All are supported by the Study Guide, Test Banks, and other supplements to the book.

New Web Button Content

We continue to link the book through web buttons to pedagogical features found at our website. Two types of icons appear throughout the book, indicating that additional content on a subject can be found online. Button types include:



This symbol directs students to **Interactive Graphs.** Developed under the supervision of Norris Peterson of Pacific Lutheran University, this interactive feature depicts major graphs and instructs students to shift the curves, observe the outcomes, and derive relevant generalizations. Ten new Interactive Graphs have been added to the twenty in the previous edition.

Production Possibilities Curve

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The data presented in a production possibilities table can also be shown graphically. We use a simple two-dimensional graph, arbitrarily representing the output of capital goods (here, robots) on the vertical possibilities curve axis, as shown in Figure 2.1 (Key Graph). Following the procedure given

in the appendix to Chapter 1, we can graph a production

curve is a production frontier because it sh attainable outputs. To obtain the various of pizza and robots that fall on the producty curve, society must achieve both full emploductive efficiency. Points lying inside (to curve are also attainable, but they reflect therefore are not as desirable as points on inside the curve imply that the economy co of both robots and pizzas if it achieved fif and productive efficiency. Points lying outs of) the production possibilities curve, like it



This symbol directs students to **Origins of the Idea.** These brief histories were written by Randy Grant of Linfield College and, with the new entries, examine the origins of 70 major ideas identified in the book. Students will find it interesting to learn about the economists who first developed such ideas as opportunity costs, equilibrium price, the multiplier, comparative advantage, and elasticity.

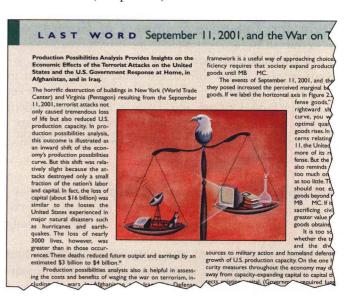


New Last Words and Global Perspectives

New Last Word topics are September 11 and the war on terrorism (Chapter 2); efficiency gains from generic drugs (Chapter 3Web); the long-run fiscal imbalance in the Social

Security system (Chapter 18); pricing based on differences in group demand elasticity (Chapter 20); the controversy over CEO pay (Chapter 28); and the WTO protests (Chapter 37). In addition, a few Last Words have been relocated to match reorganized content.

New Global Perspective pieces include a list of the world's 10 largest corporations (Chapter 5), the top 12 globalized nations (Chapter 6), the full-employment budget deficits or surpluses in selected nations (Chapter 12), and U.S. goods and services trade deficits with selected nations (Chapter 38).



Distinguishing Features

Comprehensive Explanations at an Appropriate

Level *Economics* is comprehensive, analytical, and challenging yet fully accessible to a wide range of students. Its thoroughness and accessibility enable instructors to select topics for special classroom emphasis with confidence that students can read and comprehend independently other assigned material in the book. Where needed, an extra sentence of explanation is provided. Brevity at the expense of clarity is false economy.

Fundamentals of the Market System Many economies throughout the world are making difficult transitions from planning to markets. Our detailed description of the institutions and operation of the *market system* in Chapter 4 is even more relevant than before. We pay particular attention to property rights, entrepreneurship, freedom of enterprise and choice, competition, and the role of profits because these concepts are often misunderstood by beginning students.

Early Integration of International Economics

We give the principles and institutions of the global economy early treatment. Chapter 6 examines the growth of world trade, the major participants in world trade, specialization and comparative advantage (without the more difficult graphs), the foreign exchange market, tariffs and subsidies, and various trade agreements. This strong introduction to international economics permits "globalization" of later discussions in both the macro and the micro chapters.

Early and Extensive Treatment of Government

Government is an integral component of modern capitalism. This book introduces the economic functions of government early and accords them systematic treatment in Chapter 5. Chapter 30 examines government and market failure in further detail, and Chapter 31 looks at salient facets of public choice theory and taxation. Both the macro and the micro sections of the text include issue- and policy-oriented chapters.

Step-by-Step Approach to Macro We believe that it is a mistake to yank the student back and forth between elaborate macro models. So we systematically present macroeconomics by:

 Examining the National Income and Product Accounts and previewing economic growth, unemployment, and inflation

- Discussing three key macro relationships
- Presenting the aggregate expenditures model (AE model) in a single chapter
- Developing the aggregate demand-aggregate supply model (AD-AS model)
- · Using the AD-AS model to discuss fiscal policy
- Introducing monetary considerations into the AD-AS model
- Using the AD-AS model to discuss monetary policy
- Extending the AD-AS model to include both shortrun and long-run aggregate supply
- Applying the "extended AD-AS model" to macroeconomic instability, economic growth, and disagreements on macro theory and policy.

Emphasis on Technological Change and **Economic Growth** This edition continues to emphasize economic growth. Chapter 2 uses the production possibilities curve to show the basic ingredients of growth. Chapter 8 explains how growth is measured and presents the facts of growth. Chapter 17 discusses the causes of growth, looks at productivity growth and the New Economy, and addresses some of the controversies surrounding economic growth. Chapter 26 provides an explicit and cohesive discussion of the microeconomics of technological advance, including topics such as invention, innovation, and diffusion; start-up firms; R&D decision making; market structure and R&D effort; and creative destruction. Chapter 39Web focuses on the developing countries and the growth obstacles they confront. Chapter 40Web examines growth in China and Russia.

Stress on the Theory of the Firm We have given much attention to microeconomics in general and to the theory of the firm in particular, for two reasons: First, the concepts of microeconomics are difficult for most beginning students; abbreviated expositions usually compound these difficulties by raising more questions than they answer. Second, we wanted to couple analysis of the various market structures with a discussion of the impact of each market arrangement on price, output levels, resource allocation, and the rate of technological advance.

Focus on Economic Policy and Issues For many students, the macro chapters on fiscal policy, monetary policy, and public debt and the micro chapters on antitrust, agriculture, income inequality, labor issues, and health care are where the action is. We guide that action along logical lines through the application of appropriate analytical

tools. In the micro, we favor inclusiveness; instructors can effectively choose two or three chapters from Part 9.

Integrated Text and Website *Economics* and its website are highly integrated through in-text web buttons, web-based end-of-chapter questions, bonus web chapters, multiple-choice self-tests at the website, web newspaper articles, web math notes, and other features. Our website is part and parcel of our student learning package, customized to the book.

Organizational Alternatives

Although instructors generally agree as to the content of principles of economics courses, they often differ as to how to arrange the material. *Economics* includes 10 parts, and that provides considerable organizational flexibility. We chose to move from macroeconomics to microeconomics because that is the course sequence at the majority of colleges and universities. The introductory material of Part 1, however, can be followed immediately by the microanalysis of Parts 6 and 7. Similarly, the two-path macro enables covering the full aggregate expenditures model or advancing directly from the basic macro relationships chapter to the AD-AS model.

Some instructors will prefer to intersperse the microeconomics of Parts 6 to 8 with the problems chapters of Part 9. Chapter 33 on agriculture may follow Chapter 23 on pure competition; Chapter 32 on antitrust and regulation may follow Chapters 24 to 26 on imperfect competition models and technological advance. Chapter 35 on labor market issues (unions, discrimination, and immigration) may follow Chapter 28 on wages; and Chapter 34 on income inequality may follow Chapters 28 and 29 on distributive shares of national income.

Instructors who teach the typical two-semester course and feel comfortable with the book's organization will find that, by putting Parts 1 to 5 in the first semester and Parts 6 to 10 in the second, the material is divided logically between the two semesters. For those instructors who choose to emphasize international economics, Parts 1 to 5 and 10 may be treated the first semester, and Parts 6 to 9 the second.

Those teaching a one-semester course will discern several possible chapter groupings. At the end of the Table of Contents we suggest outlines for three one-semester courses, emphasizing macroeconomics, microeconomics, or a survey of micro and macro theory, and two one-quarter-course options.

Pedagogical Aids

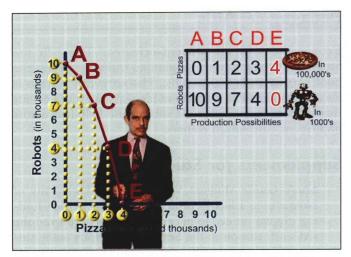
Economics is highly student-oriented. The "To the Student" statement at the beginning of Part 1 details the book's many pedagogical aids. The sixteenth edition is also accompanied by a variety of high-quality supplements that help students master the subject and help instructors implement customized courses.

Supplements for Students

• Study Guide William Walstad of the University of Nebraska at Lincoln, who is one of the world's leading experts on economic education, has prepared the sixteenth edition of the Study Guide, which many students find indispensable. Each chapter contains an introductory statement, a checklist of behavioral objectives, an outline, a list of important terms, fill-in questions, problems and projects, objective questions, and discussion questions. The answers to Economics' end-of-chapter Key Questions appear at the end of the Study Guide, along with the text's glossary.

The *Guide* comprises a superb "portable tutor" for the principles student. Separate *Study Guides* are available for the macro and micro paperback editions of the text.

- DiscoverEcon with Paul Solman Videos (www. mcconnell16.com/discoverecon) A DVD and software program, this student online tutorial plus videos is new with the sixteenth edition of McConnell and Brue. It contains a fully updated and enhanced version of DiscoverEcon, developed by Gerald C. Nelson at the University of Illinois-Urbana-Champaign, with topical reviews, exercises, interactive graphs, multiplechoice test questions, and the option for e-submission of test and essay results to the instructor. It provides links to related videos for key topics on an accompanying DVD. Paul Solman, economics correspondent for The Lehrer News Hour, is the creator of the video component, which consists of 30 video segments ranging from 7 to 10 minutes in length. They explain the key economic ideas such as economic growth, elasticity, and production possibilities in a memorable, accessible way. All of these resources are closely linked to the text by chapter and page references.
- Website (www.mcconnell16.com) Highly visible "Web buttons" in the text alert students to points in the book where they can springboard to the site to learn more. There also are weekly news updates, an interactive glossary, and self-grading tests—all specific to Economics. For the math-minded student, there



From a Chapter 2 video, Production Possibilities.

is a "Want To See the Math?" section, written by Professor Norris Peterson, where they can explore the mathematical details of the concepts in the text. There are also three optional bonus web chapters, as previously discussed.

Supplements for Instructors

- Online Course Management with DiscoverEcon with Paul Solman Videos With the new DiscoverEcon with Paul Solman Videos, instructors can assign the DiscoverEcon software exercises as homework, track student participation and progress, and give immediate feedback on student essays. The new syllabus development tool makes it possible to build an online syllabus with direct linking to DiscoverEcon exercises, special websites and the Solman videos. In addition to the DiscoverEcon interactive exercises that give every student a unique problem set, the software now contains ALL end-of-chapter questions, with a newly designed graph tool that lets students construct graphs to answer questions and include them with the essay answers. Essay grading is dramatically simplified with the new instructor website that shows the student answer and a recommended answer written by Stan Brue.
- Instructor's Manual Randy Grant of Linfield College has revised and updated the Instructor's Resource Manual. It includes chapter summaries, listings of "what's new" in each chapter, teaching tips and sug-

gestions, learning objectives, chapter outlines, data and visual aid sources with suggestions for classroom use, and questions and problems.

Available again in this edition is an MS-WORD version of the *Manual*. Instructors can print out portions of the *Manual*'s contents, complete with their own additions and alterations, for use as student handouts or in whatever ways they wish. This capability includes printing out answers to the end-of-chapter questions.

- Instructor's Resource CD-ROM This CD contains everything the instructor needs, including Power-Point slides, transparencies of the text graphs and charts, Test Bank I, and the Instructor's Manual.
- multiple-choice and true-false questions, most of which were written by the text authors. Test Bank II also contains around 6300 multiple-choice and true-false questions, written by William Walstad. All Test Bank II questions are categorized according to level of difficulty: easy, moderate, or difficult. Finally, Test Bank III contains more than 600 pages of short-answer questions and problems created in the style of the book's end-of-chapter questions. Test Bank III can be used to construct student assignments or design essay and problem exams. Suggested answers to the essay and problem questions are included.

For all test items in Test Banks I and II, the kind of question is identified (for example, D = definition, C = complex, etc.) as are the numbers of the text's pages that are the basis for each. Also, each chapter in Test Banks I and II has an outline or table of contents that groups questions by topics. In all, more than 12,500 questions give instructors maximum testing flexibility while ensuring the fullest possible text correlation.

Test Banks I and II are available in computerized Brownstone Diploma versions, as well as in MS Word. Diploma systems can produce high-quality graphs from the test banks and feature the ability to generate multiple tests, with versions "scrambled" to be distinctive. This software will meet the various needs of the widest spectrum of computer users. Essays and Problems is available in printed and MS Word formats.

 Color transparencies There are more than 200 new full-color transparencies for the sixteenth edition. They encompass all the figures appearing in *Economics*. Additionally, the figures and tables from the text are found on the Instructor's Resource CD-ROM.

A Note about the Cover

The sixteenth-edition cover includes a photograph of a roof detail of a building in the Cyclades, a group of Greek islands in the Aegean Sea. The location of the building is especially appropriate, given that the modern word "economics" comes from the Greek oikonomikos, meaning "household management."

The photo highlights Greek architecture, which combines reliance on precision of order and the ability to break away from strict geometrical precision to create a more pleasing whole. That is exactly what we have tried to accomplish with Economics. Our goal is to present the principles of economics in a precise, orderly, step-by-step way. There is great beauty, logic, and power in economic models—a fact that we emphasize throughout the book. But an overemphasis on economic theory in the introductory course renders the subject flat and boring and does students a great disservice. Time and again *Economics* breaks away from the models by examining real-world examples and institutional detail. These necessary departures occur not only within the main flow of the text but also in special applications chapters, the new Consider This pieces, the Last Word minireadings, and the supporting web content. All this adds up, we think, to a more pleasing whole—in this case, a more realistic introduction to economics and the economy.

Acknowledgments

We give special thanks to Norris Peterson of Pacific Lutheran University and Randy Grant of Linfield College, who teamed up to create the "button" content on our website. We again thank James Reese of the University of South Carolina at Spartanburg, who wrote the original Internet exercises. Although many of those questions have been replaced or modified in the typical course of revision, several remain virtually unchanged. We also thank Robert Jensen of Pacific Lutheran University for his meticulous help in proofreading the entire manuscript and C. Norman Hollingsworth at Georgia Perimeter College for his ever-popular and creative PowerPoint slides. Finally, we thank William Walstad and Tom Barbiero (the coauthor of our Canadian edition) for their helpful ideas and insights.

We are greatly indebted to an all-star group of professionals at McGraw-Hill—in particular Gary Burke, Lucille Sutton, Erin Strathmann, Jean Lou Hess, Keith McPherson, Martin Quinn, Karen Minnich, and Rebecca Hicks—for their publishing and marketing expertise.

We thank Jacques Cournoyer for his vivid Last Word illustrations and Robin Sand for her selection of the Consider This photos. Michael Warrell provided the vibrant cover.

The sixteenth edition has benefited from a number of perceptive reviews. The contributors, listed at the end of the Preface, were a rich source of suggestions for this revision. To each of you, and others we may have inadvertently overlooked, thank you for your considerable help in improving *Economics*.

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Wendy Wood, Bevill State Community College

Suggested One-Semester and One-Quarter Course Outlines

(Core Chapters Are Indicated by "c"; Optional Chapters by "o")

Chapter	One-Semester Course			One-Quarter Course	
	Macro Emphasis	Micro Emphasis	Macro-Micro Survey	Macro Emphasis	Micro Emphasi
I	С	С	С	С	с
2	C	С	С	С	с
3	С	С	С	С	с
3 Web		0	0		0
4	С	С	С	С	с
5	С	С		С	c
6	С	С		С	с
7	С		с	С	
8	С		с	С	
9	с		с	c	
10	С		с	С	
11	С		С	С	
12	С		С	С	
13	С		С	С	
14	С		С	С	
15	С		С	С	
16	С		0	0	
17	С		0	0	
18	С		0		
19	С		0		
20		С	С		С
21		С			
22		С	С		С
23		С	С		c
24		С	С		с
25		С	0		с
26		С	0		с
27		С			с
28		С			с
29		c			С
30		0			0
31		0			
32		o¹			
33	The second secon	o ²			
34		o ³		10116-101	
35		o ⁴			
36		0			
37	0	0			
38	0	0			
39 Web	0				
40Web	0				

¹If used, Chapter 32 may follow Chapter 26.

²If used, Chapter 33 may follow Chapter 23.

³If used, Chapter 34 may follow Chapter 28 or 29.

⁴If used, Chapter 35 may follow Chapter 28.

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