Telecourse Study Guide for

THIRD EDITION

THE SOUTHERN CALIFORNIA CONSORTIUM

Telecourse Study Guide for Economics U\$A

Third Edition

A Television Course Created and Produced by
The Educational Film Center
and
The WEFA Group
(Wharton Econometrics Forecasting Associates)

developed by The Southern California Consortium

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PREFACE

Economic events and decisions influence our lives, but few Americans have more than a nodding acquaintance with the underlying theories and principles that help to explain economic trends. Words such as supply and demand, income distribution, and resource allocation punctuate the evening news and financial headlines, but have little real meaning for those of us attempting to unravel the day's events.

ECONOMICS U\$A will provide you with the opportunity to sit at the feet of leading twentieth-century economists, and to learn the principles of economics through the absorbing drama of recent historic events.

Description of Course Materials

Should this be your first experience with a telecourse, it is important for you to become familiar with its components, how they function with each other, and how to use them. As you read the following sections, realize that ECO-NOMICS U\$A was designed to be offered as either a one-semester survey course or a two-semester macro- and microeconomics course. Following your teacher's instructions, use those portions of the course applicable to your situation.

Television Programs

The video portion of ECONOMICS U\$A, developed by the Educational Film Center in Annandale, Virginia, approaches the subject of economics in a journalistic style. Former CBS network correspondent David Schoumacher is the investigative reporter, exploring the causes and effects of the major economic events of the twentieth century. The men and women who participated in many of these events provide a depth of insight rarely offered contemporary television audiences.

In each program noted economist Dr. Richard Gill, former professor of economics at Harvard University, analyzes and interprets the decisions and consequences that underlie economic events. As a counterpoint to the reportorial, fact-finding Schoumacher, Gill explains the stories that are unfolding in light of specific economic principles. Together, Schoumacher and Gill will provide you with a clear explanation of basic economic concepts.

Using television for learning is not like watching a comedy series or sporting events. At first you will have to concentrate on active watching. It is easy to slip into the passive, half-viewing stance you usually bring into play when you watch entertainment television. In most instances you will have a chance to review the lesson in an alternative time slot, or watch videocassettes of the lesson in a learning center on campus.

If you have an audio recorder available, tape the audio portion of the television program as you are viewing it. This will provide an excellent source for review once you have seen and can visualize the video portion of the program. Note any questions you have after the program, and contact your teacher on campus during his or her office hours.

Audio Modules

The audio modules are specifically designed to provide greater depth and detail for students enrolled in the two-semester course in macroeconomics and microeconomics. They include expanded interviews with economists who appear in the video portion of the lesson, and add the thoughts and insight of other noted authorities.

The audio modules delve deeper into the theory of economics. Within the structure of the thirty-minute audio lesson, you will have the opportunity to explore the complexities of theoretical applications, such as a cost/benefit analysis in relation to pollution, or product differentiation and monopolistic competition.

If you are enrolled in the one-semester survey course and are interested in learning more about a particular area of study, check with your instructor to see if you can check out or listen to the audio module that accompanies the lesson.

Text

The text ECONOMICS U\$A, Third Edition, is a collaborative work written by acclaimed author/teacher Edwin Mansfield of the University of Pennsylvania and Nariman Behravesh, noted economist and President of Oxford Economics. The case studies presented in the text parallel the video documentaries, thus linking visual examples to textual content.

The text is an essential part of the course. It establishes a foundation of information, elaborates on concepts introduced in the television segment, and expands ideas through graphs and case studies. Be sure to read each chapter as you go. Economics, like other subjects, builds upon the knowledge acquired in previous lessons. If you fall behind, or skip over information you do not understand, subsequent lessons will be more difficult to comprehend.

How can you judge how well you understand the content presented in the video and its companion text chapter? The study guide you are now reading provides a number of opportunities for you to test your knowledge. Each lesson includes an answer key. Once you have completed your study of the video and text chapter, and have responded to the questions, check the accuracy of your answers. Use this as a guide to determine which areas need further attention and study. The Lesson Review section of this study guide may assist you in this regard, as will your campus-based instructor.

Study Guide

The Telecourse Study Guide for ECONOMICS U\$A was developed by the Southern California Consortium in collaboration with Nariman Behravesh and the project team. Four economics teachers with eighty-five years of combined teaching experience at two- and four-year colleges guided its development: Robert Augur of Pasadena City College, Ralph Lewis of Orange Coast College, Sol Kaufler of Pierce College, and James Phillips of Cypress College.

This study guide is a detailed roadmap to the course. It includes Learning Objectives, Key Terms, Video Questions, Self-Test Questions, and a comprehensive Lesson Review. In addition, two-semester students will utilize the Extended Learning section which incorporates the audio assignment, more detailed short-answer questions and problem sets, and an annotated bibliography.

You will gain the most from this telecourse by using its components as instructed. Together they will provide you an unforgettable learning experience.

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LESSON 1: SCARCE RESOURCES: WHAT IS ECONOMICS ALL ABOUT?

INTRODUCTION

Economics. What meaning does the word hold for you? Maybe you think that the study of economics is pretty dry, dull stuff, best left to the president's advisers and other specialists. But have you really stopped to consider the important implications the study of economics has for the way you live your life and the decisions you make every day?

For example, the current state of the economy has direct and significant bearing on

- whether you are able to get a job.
- whether you are able to earn more money just by working harder.
- how much you pay for every item or service you purchase.
- what sort of home you can afford.

And that is only the beginning. Economics concerns not only the wages we make and the way we spend them, but our total lifestyle. Ours has been a country of enormous economic growth. And that growth has made possible a lifestyle characterized by (in light of world standards) great luxury and large amounts of leisure time. This is not to say that we do not have serious economic problems. We do. The point is that we have a nation of well educated, capable workers with potential to solve many of the problems if we can direct our energies and resources wisely.

An understanding of economics provides the foundation for making important decisions.

- What career to pursue. Twenty years from now, what place will your chosen career occupy in the economy?
- Which political leaders to support. How can you tell whether their arguments and promises make sense, or are grounded in fundamental understanding of basic economics?
- How to be a responsible consumer. Should you buy a domestic or foreign car? Should you support the big companies or smaller

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businesses? What are monopolies and trusts? How do they work? And are they important?

Whether to support social welfare programs. Are we doing too little or too much by way of income support programs to help the poor in our country? What about foreign aid? Do those programs really make a difference?

In this and the lessons to come, we'll consider the ways in which our decisions can influence some of the most significant economic questions of our time:

- What determines the extent of unemployment in the American economy, and what can be done to reduce it? And, in conjunction with this question, what determines the rate of inflation, and how can we reduce it?
- What is the significance of labor productivity? Why have we experienced a slowdown in productivity in the U.S.? What can be done about it?
- Why is competition desirable for our economy, and what are some of the ways in which we can preserve a healthy spirit of competition?
- Why does poverty exist in the world, and can anything be done to alleviate it?

In Lesson 1, we'll lay the foundation for examining these problems in more detail by considering the relationships between resources and technology, and the various factors that determine production—what is produced, and how much.

What You Should Learn

There are several skills you'll need to acquire in order to have a good understanding of the discussions that follow. By the end of Lesson 1, you should be prepared to:

- 1. Define economics.
- 2. Define and categorize economic resources.
- 3. List the four basic questions that economists ask in determining the fundamental characteristics of any economic system.
- 4. Describe the concept of *opportunity cost*, and explain how it relates to production.
- 5. Distinguish between positive economics and normative economics.
- 6. Describe how direct and inverse relationships appear on a line graph.
- 7. List the four major tasks of an economic system.
- 8. Describe how the *production possibilities* curve is derived and how it is used to explain costs and economic growth.

KEY TERMS

Labor Productivity Collusion **Economics Human Wants** Resources **Economic Resources** Free Resources Technology

Capital Opportunity Cost Positive Economics Normative Economics Economic Model **Production Possibilities** Curve Law of Increasing Cost

VIDEO

Watch

Economics U\$A Program 1: SCARCE RESOURCES: WHAT IS ECONOMICS ALL ABOUT?

After Viewing

See if you can respond to the following questions.

- 1. What important economic principle is illustrated through the conflict over the Alaska Lands Act bill?
- 2. As a result of World War II, our economy moved from a period of low employment and industrial collapse to a period of economic prosperity and unprecedented growth. What factors contributed to this change, and how do those factors relate to economic choices?
- 3. How did the passage of OSHA (the Occupational Safety and Health Act) change the nature of the economic choices faced by the textile industry?

Read

Read the Prologue: Economic Problems: A Sampler, pages 1-7, and Chapter 1: What Is Economics?, pages 9-24 and 31-33 in your text.

SELF-QUIZ

Multiple Choice

- 1. Which of the following statements MOST accurately describes our economy from 1930 to the present?
 - Rates for both unemployment and price level have crept steadily upward.
 - b. Unemployment has generally gone up, though in irregular patterns, while price level has remained fairly constant.
 - c. Price level has risen substantially; unemployment, after peaking in the 1930s, has gone up and down in irregular cycles.
 - d. Unemployment has remained fairly constant since the 1930s, but the price level has tended to decline.
- 2. Economists today would probably consider all of the following to be among the most pressing economic problems of our time EXCEPT
 - a. overabundance of output.
 - b. unemployment.
 - c. poverty.
 - d. declines in U.S. productivity.
- 3. According to 1989 figures, about what percent of the U.S. population could be classified as living in poverty?
 - a. Fewer than 5 percent.
 - b. About 15 percent.
 - c. Between 25 and 35 percent.
 - d. More than 35 percent.
- The services, goods, and circumstances that people desire are BEST defined as
 - a. human wants.
 - b. economic resources.
 - c. free resources.
 - d. capital.
- 5. A steel mill is an example of
 - a. an abundant resource.
 - b. a technological resource.
 - c. an economic model.
 - d. capital.
- 6. The fact that most resources are limited forces us to constantly
 - a. expand output.
 - b. raise prices.
 - c. develop new technology.
 - d. make choices.

- According to the production possibilities curve and the theory of opportunity cost, as output of a given product increases, the per unit production cost of that product
 - a. goes up at a steady rate.
 - b. goes up at an ever higher rate.
 - c. tends to remain about the same.
 - d. tends to go down.
- 8. The Labor Department's calculation of the number of people unemployed in the country is an example of
 - a. positive economics.
 - b. normative economics.
 - c. economic theory.
 - d. an economic model.
- According to the text, an economic system does all of the following EXCEPT
 - a. determine what and how much society will produce.
 - b. determine how goods and services will be distributed throughout society.
 - c. predict the likelihood of future prosperity, given current resources.
 - d. define the current growth rate for per capita income.
- 10. Suppose we constructed a graph of the production possibilities curve. In a society where half the resources were being employed, the point representing current output would appear
 - a. on the curve, about midway down.
 - b. at the very lowest point on the curve.
 - c. somewhere outside the curve.
 - d. somewhere inside the curve.

True-False

worker.

 1.	Economics has less to do with the allocation of resources than the gold reserves and the value of the dollar in international markets.
 2.	Economic resources include such tangible items as land, labor, machinery, and structures, but exclude skills such as technical and managerial knowledge.
 3.	The test of whether a resource is an economic resource or a free resource is price.
 4.	The opportunity cost of using a resource to increase the production of one good is the value of what that good could have produced had it been used in the best alternative way.
 5.	In attempting to calculate the potential of the economy at the beginning of World War II, Nathan determined the number of idle workers and multiplied that number times the average output per

6 / Economics U\$A 6. The increase in military production during World War II was achieved at the expense of any additional civilian capability. 7. In normative economics, the results you get depend on your basic values and preferences; in positive economics, the results can be tested by looking at the facts. 8. A model takes a simple situation in the real world and dresses it in the complexities of alternative possibilities. It is less a predictive tool than an intellectual exercise. 9. Because the capacity to produce goods and services is far more limited than human wants, there is the necessity of choice. Economists are concerned with how such choices are made in various circumstances and how they should be made. 10. Adam Smith doubted that a free, competitive society could function

Discussion Questions

1. Economic moralists are fond of saying, "You can't get something for nothing." Is this always true? Under what circumstances, if any, is it not true?

effectively without central planning or government interference.

- 2. How do families, as opposed to an entire economy like the U.S. or USSR, solve the four basic economic problems?
- 3. Someone has said that economists study how people make choices and that sociologists study why people don't have any choices to make. What does that statement mean?
- 4. What is the opportunity cost of (a) spending an evening at a movie; (b) a college education?

LESSON REVIEW

If you had difficulty with the Self-Quiz, or would like additional assistance, read the following lesson review. It should reinforce and help you understand the content presented in this lesson.

What Is Economics?

Economics—according to one definition at least—is the study of how resources are allocated among alternative uses to satisfy human wants. To make better use of this definition, we must define what we mean by resources and human wants. Let's begin with the latter.

Human wants are material goods, services, and circumstances that people desire. Some of these wants are basic and apply to all persons: the desire for

food, clothing, and shelter. Some are highly variable and dependent upon culture, background, education, and personal preference. For example, some people prefer reading books and gardening to traveling or playing polo. Some like baseball games, some the symphony, and so on. And some wants are, in effect, created by society, largely through advertising. Certain things we see as desirable—luxury cars, expensive homes, stylish clothes—are made appealing to us by the way they're depicted in magazines, on television, and in films.

Resources are the items, substances, and services used to produce whatever satisfies human wants. Economic resources are scarce; free resources, like air. are abundant and they may cost nothing. Whether a resource should be classified as economic or free depends entirely on cost. Anything for which we're required to pay-and for most of us these days, that includes practically everything (even water)—is an economic resource, not a free resource.

Economic Resources: Three Categories

Economic resources can be classified into three groups:

- 1. Land. Land is really a shorthand term that includes plots of ground and minerals. What resources do we derive from land? Many. Including space for housing, commercial and public buildings, factories, recreational centers, and various other facilities; area on which to grow crops. including not only edible crops but timber and other natural resources; and environmental space that provides scenic and recreational pleasure beyond its immediate contribution to our agricultural or industrial productivity.
- 2. Labor. Labor is typically thought of as physical effort: farming, moving, building, digging, assembling. But mental efforts are labor too: studying, writing, conducting research, examining, designing. In 1992, over 100 million people were either employed or seeking work in our country.
- 3. Capital. Capital includes the facilities, equipment, inventories and other producible resources that contribute to production. Oil refineries, blast furnaces, and aircraft plants are all examples of capital resources—but so are pencils, calculators, rulers, and paper.

Technology and Choice

Technology includes the knowledge of scientists, engineers, managers. craftsmen, and others regarding how goods and services can be produced. The state of our current technology sets limits on our production.

Suppose, for example, that engineers at an automobile manufacturing plant determine that it will take 500 hours minimum to build an automobile, given current technology. If that technology expands in some way-say new methods or materials are used to cut labor time—the number of hours can be shortened, and output can be increased.

Making choices. Because resources are limited, and because current technology sets limits on what can be produced using those resources, our

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capacity to produce always lags behind human wants. This forces us to make choices:

- 1. Which resources will be used?
- 2. How much of those resources will be used?
- 3. What will be produced?
- 4. How will the products be allocated?

The Essential Questions and Tasks of an Economic System

In order to understand the fundamental characteristics of any economic system, economists pose four questions.

- 1. What determines the level and composition of society's output? Within the past few years, particularly, many persons have seriously questioned our spending priorities. Should we be spending as much of our resources as we do on defense? Should we spend more on environmental restoration and protection? More on education? Such questions have important personal and social implications for all of us.
- 2. What determines how each good and service will be produced? If resources are used wisely and efficiently, our production will reflect our true capabilities. If skilled workers are not allowed to use their talents, if natural resources are wasted (condominiums are built on land that should be farmed), inefficiency and lower production will result.
- 3. What determines for whom goods and services will be produced? How much should each person receive? Should we continue to base this decision on individuals' skills, knowledge and education, and contributions through labor? Or should we find some other means of dividing goods and services—say, a more egalitarian society in which the amount received by one family of four differs little from what's received by another family of four, regardless of their personal contributions.
- 4. What determines the rate of growth of per capita income? As population grows, an adequate economic growth rate becomes essential for economic survival. And it has become a key issue not only in our country but particularly in less developed countries throughout Asia, Africa, and Latin America.

In answering these questions, we need first to define the concept of *opportunity cost*. Imagine for a moment that you live in a "closed" society, one with no access to the outside world, one wholly dependent upon its own resources for survival. Now imagine further that this hypothetical society will manufacture only two goods: food and clothes. How much of each can it produce? How much should it produce to survive? These are the questions that challenge you and the other inhabitants.

First, you determine what your hypothetical society can do: how much food it can produce if all resources are devoted to food production; and how much clothing it can produce if all resources are devoted to clothing production.

Then, you determine how much food can be produced at various levels of clothing production, and vice versa. The resulting combinations can be charted as shown below:

Possibility	Amount of food produced per year (tons)	Amount of clothing produced per year (tons)
A	0	200
В	100	180
C	200	150
D	300	100
\boldsymbol{E}	400	0

Now you know what's attainable. You know, for instance, that if your society produces 200 tons of clothing per year, it can produce no food at all. On the other hand, if it produces 100 tons of clothing, it can produce 300 tons of food—and so on. These figures give you a realistic basis for making a choice.

Notice that whenever production of one good goes up, production of the other declines. That's because there are only so many resources to devote to production. The cost of using resources in a certain way is equal to the value of what those same resources could have produced had they been used in the best alternative way. In other words, this is the opportunity cost—a measure of what's lost by choosing one alternative use of resources over another.

Positive Economics versus Normative Economics

Suppose you read in the paper one day that if interest rates continue at the present rate or rise, housing starts are expected to drop by 3 percent. Such a statement merely describes what is, and predicts what is likely to occur. It offers no judgments about what should be, or whether the housing decline is good or bad. Such a statement is positive economics—statements, propositions, of what "is."

If, on the other hand, you read an editorial stating that the president should take steps to lower interest rates because middle income Americans are being forced out of the housing market, you would be in the world of normative economics, statements about what ought to be, or about what a person. organization, or nation ought to do.

Propositions in positive economics can be tested objectively by appealing to the facts. Sometimes, of course, it is hard to get the facts to work with. If the interest rates suddenly drop, who can say whether the predicted 3 percent drop in housing would have come to pass? Essentially, however, positive economics deals with facts, not value judgments.

Normative economics, by contrast, is a matter of values. One person may feel that the high interest rates serve an important numose, while another may feel

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that any benefits gained by such interest rates must be forgone in order to support the housing industry vital to our economic growth. These differences cannot be resolved by uncovering more facts. Nevertheless, we must recognize that value judgments are the basis for many economic decisions and policies.

Methodology and Model Building

How do economists make their decisions? How do they look objectively at economic data and make predictions about our future?

One way is through the use of economic models. A model is a simplified way of looking at the world that shows how two (or sometimes more) variables interact. Models are often visually depicted through graphs.

What are the primary characteristics of economic models? A couple of points are particularly important to remember:

- To be useful, a model must simplify the real world. Models are not meant
 to replicate reality exactly. In fact, if they did so, they would not be as
 useful because they would include too many extraneous variables.
 Economists use models precisely because the real world is so complex
 that they need to separate two or more variables and consider them in
 isolation in order to see how they really do interact. Of course,
 oversimplification isn't good either. The trick is to effect a balance:
 including the most relevant and significant variables, and excluding all
 others.
- 2. The purpose of a model is to make predictions about the real world. The most important test of a model is how well it predicts. This doesn't mean that the predictions must be right on target every time. That would be unrealistic. The point is that a model capable of predicting events with reasonable accuracy will be more useful than one which predicts with far less accuracy.

Models and Graphs

Let's say an economist devises a model that predicts clothing expenditure will rise as income goes up. By collecting data and graphing it, the economist can quantify her model; that is, she can show how much effect one variable has on another. Without such quantification, most models are much less useful. Almost anyone could guess that people who earn more money would spend more on clothes. So that's not very exciting information. But it might be interesting and useful to know that for each additional \$1,000 in income the average consumer will spend \$60 on clothing. That kind of data would be of particular value to you if you were a clothing manufacturer or retailer.

Direct and Inverse Relationships

Notice in the figure below that the line showing the relationship between income and clothing expenditure slopes upward and to the right. That is, the higher the income, the higher the clothing expenditure. This is a direct relationship between variables.